HUMANASONICS:
COMPOSITIONS INSPIRED BY ANTHROPOLOGICAL HUMAN UNIVERSALS

PAUL A. NOVOTNY

A THESIS SUBMITTED TO
THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF ARTS

GRADUATE PROGRAM IN MUSIC
YORK UNIVERSITY
TORONTO, ONTARIO

APRIL 2017

ABSTRACT

Human universals are the commonalities—the "oneness"—of mankind, and anthropology is charged with their study. Universals form a general, immutable foundational theory of humanity. The purpose of this thesis is to show how that theory can be used to inspire composition.

"Human Universals," Donald E. Brown's seminal 1991 work is an exhaustive and comprehensive overview of the subject and provided my understanding of anthropological human universals. Music composition is viewed as "the organization of contrasting sounds"–sonics. *Humanasonics* is a new word that names the concept of deriving inspiration from human universals for music composition.

This suite of program music is structured in four movements, totalling approximately twenty minutes, for jazz orchestra. Each movement is inspired by a human universal trait or condition.

The conclusion asserts that when music is metaphorically based on immutable human universality, it will lead to an inherent understanding, unconscious or conscious, of the work.

ACKNOWLEDGEMENTS

I would like to thank my nephew, Henry Lee who is currently completing graduate work in anthropology at the University of Toronto. He introduced me to the topic of anthropological human universals in 2014, which then led me to the writings of Donald E. Brown.

Professors Joyce Zemens, Michael Coghlan, Jay Rahn, Barry Elmes, Mark Chambers, William Mackwood, Matt Vander Woude and Norman Ludwin have been most inspiring and helpful. Daniel Barnes, Robi Botos, Amin Bhatia, Mike Malone, Michael Colgrass, Bruce Cassidy, Royce Williamson, Cyd Hosker, Kathleen Welsby and Graduate Program Assistant Tere Tilban-Rios have also provided significant encouragement on this journey.

I would like to give very special thanks to my supervisor professor Al Henderson for caring so much. He made himself available at all times and pushed me to find the most current and multi-disciplined research on the topics of universals and music universals. He sought detail and accuracy during both the oral defence and a rigorous late night follow-up phone interview that lasted until 2:30 am. Those experiences exemplified a remarkable level of supervisory care. We both share a penchant for meticulous score engraving, but his attention to detail has resulted in what I consider to be very clean and accurate scores. In retrospect, I view our experience as "excellent teamwork" that heightened my desire to meet his intense analytical expectations.

Furthermore, the experience of group study involving the sharing of information and critical thinking during open discussion has been so helpful, appreciation goes to all of my classmates, but especially Doug Wilde and Keith Loach, who have been most helpful as I worked out exactly what this thesis would assert.

While working on this research I became very busy with the TV business. Kristina Gunning, my broadcast producer always gave me her understanding in order to attend to my graduate work.

A very special thanks also goes to Harry Lewis for his extreme patience during proof reading. Joe Sealy, Jackie Richardson and professor Tom Reynolds—you always listened to me ruminate about this work. My entire family, Ann, Emma, Adrian, George, Barbara and mother Sylvia have all greatly supported me as I took time away from my familial duties, music-sound production business and record label in order to prioritize this research.

A sincere thank you goes to everyone.

TABLE OF CONTENTS

Page

Abstract ii

Acknowledgements iii

Table of Contents iv

List of Tables vi

List of Figures vii

INTRODUCTION 1

CHAPTER 1: Human Universals 2

CHAPTER 2: HUMANASONICS, Movement I—*Transcontinental Soul* 21

CHAPTER 3: HUMANASONICS, Movement II—*Play* 27

CHAPTER 4: HUMANASONICS, Movement III—*Riverbed* 35

CHAPTER 5: HUMANASONICS, Movement IV—*Kinship* 38

CHAPTER 6: Conclusion 44

BIBLIOGRAPHY 45

JOURNAL ARTICLES / E-BOOKS 47

WEBSITES 48

DISCOGRAPHY 50

FILMOGRAPHY 51

APPENDIX A: INSTRUMENTATION OVERVIEW, Movement I & II 52

INSTRUMENTATION OVERVIEW, Movement III & IV 53

APPENDIX B: HUMANASONICS SCORE IMAGES

Movement I—*Transcontinental Soul* 54-102
Movement II—*Play* 103-140
Movement III—*Riverbed* 141-181
Movement IV—*Kinship* 182-245

LIST OF TABLES

Table 1.1: Brown's universals and their five conventional realms 3
Table 1.2: Roughley and Passmore's realms and paradigms of pre-given universals 4
Table 1.3: Kinds of universals 4
Table 1.4: The International Phonetic Alphabet 8
Table 1.5: Type 1: "Conserved universals"-all musical utterances 10
Table 1.6: Type 2: "Predominant patterns"-all systems or styles 11
Table 1.7: Type 3: "Common patterns"-many musical systems or styles 11
Table 1.8: Type 4: "Range universals"-a discrete set of possible states for all musical systems/styles 12
Table 1.9: Denis Dutton lists seven aesthetic universal features of art 17
Table 1.10: Brown's assertion of characteristics in *The Universal People* 18
Table 1.11 *Humanasonics*, classification of universals 20
Table 2.12: *Transcontinental Soul* and *Better Git It In Your Soul*, commonalities and differences 24
Table 2.13: *Transcontinental Soul* and *Better Git It In Your Soul*, form comparison 25
Table 3.14: *Play*–Hexascale interval count and location of modulations 32
Table 5.15: *Kinship*–Woodwind and Brass family, doubles and mutes 42

LIST OF FIGURES

Figure 1.1: Notation of music expression 6
Figure 2.2: Analysis—bass intro, *Transcontinental Soul* 22
Figure 2.3: Analysis—bass intro, *Better Git It In Your Soul* 22
Figure 2.4: *TS*—Using gestures, the entire band becomes the motor 23
Figure 2.5: *TS*—Piano and bass drone effect evokes a spiritual feel 23
Figure 2.6: *TS*—Ethiopian pentatonic sound merges with *Transcontinental Soul* 26
Figure 3.7: *Play*—Ultrapolation and infrapolation of the introductory D^{+} triad 28
Figure 3.8: *Play*—The humerous "harmonic splat" 29
Figure 3.9: *Play*—Antecedent melody creates the note pool – measure A-26 29
Figure 3.10: *Play*—Movement III, *Riverbed* 6 note hexascale forms a hexachord**.** 30
Figure 3.11: *Play*—Hexachords built modally from the hexascale in sequence 30
Figure 3.12: *Play*—Hexachords adjusted to fit the composition 31
Figure 3.13: *Play*—Example of melodic linking, antecedent and consequent contour 33
Figure 4.14: *Riverbed*—The Tigray beat in 5/4 35
Figure 4.15: *Riverbed*—The *Riverbed* variation in 5/4 35
Figure 4.16: 4/4—Latin style Cha Cha 35
Figure 4.17: 4/4—Boogaloo - Funk—American popular style from the '60s (1/2 X feel) 36
Figure 4.18: 12/8—Chikchika—the most common Ethiopian jazz drum pattern 36
Figure 4.19: *Riverbed*—The *Riverbed* bass line 36
Figure 4.20: *Riverbed*—Ten common Ethiopian jazz scales 37
Figure 5.21: *Kinship*—Antecedent phrase with chords (highly euphoric) 40
Figure 5.22: *Kinship*—Antecedent phrase with 2 notes (less euphoric) 40
Figure 5.23: *Kinship*—Consequent phrase suggests C minor; 2 notes–same melody 40

INTRODUCTION

My unwitting journey into human universals began in 1996 when I co-conceived, produced, arranged, orchestrated and recorded *Africville Suite*[1] with my associate Joe Sealy.[2] Africville[3] was established by deed in Nova Scotia's Bedford Basin in 1848 and then gradually razed between about 1960-70.[4] We selected a number of people, places and events from Africville, which provided the inspiration for each song.

Africville Suite was composed in response to people being deprived of 6 organic–cultural basic human needs, rights and possessions.[5] It is activist music that continues to engage new audiences wherever we perform it, whether in Canada, Scandinavia or the US, leading me to wonder what universal human qualities people are responding to. My curiosity was piqued further when I learned that University of Toronto professor Bonnie McElhinny (PHD-anthropology) uses *Africville Suite* as a topic of study. Recently discovering anthropologist Donald E. Brown's seminal work, *Human Universals*,[6] has introduced me to the topic, compelling me to explore how they could provide inspiration for composing new music.

Thanks to Brown, I have come to see that universals have the ability to help explain those underlying, essential truths needed to achieve literal and figurative harmony in an increasingly diverse world. For example, in 2015, 7.3 billion people inhabited the earth, an increase of one billion since 2003.[7] In view of such population growth, mankind will experience more cultural difference, so understanding our commonalities is an essential counterpoint.

It must be emphasized that anthropological human universals do not discuss universal anatomical features, but focuses on the hundreds of deep–i.e., innate–universal "features of culture, society, language and mind that, so far as the record has been examined, are found among all peoples known to ethnography and history."[8]

---

[1] *The use of Italics indicates music or book titles.*
[2] Sealy, Joe, Novotny, Paul, *Africville Suite*, 1996 Juno Award Winner. Triplet Records Inc. SJ-1005-2, [CD].
[3] Africville was Canada's oldest urban black community.
[4] This coincides with the peak of US Civil rights movement indicating the movement may have influenced Canada as well.
[5] Malinowski,Bronislaw, *A Scientific Theory of Culture;* 7 universal organic needs of mankind, New York: Oxford University Press, 1960 [1944]. pg.67—(Commissariat, Kinship, Shelter, Protection, Activities, Training and Health)
[6] Brown, Donald E. *Human Universals*. 1991, McGraw-Hill.
[7] United Nations, *World Population Prospects,* – Population Division.
[8] Brown, Donald E. *Human Universals, Human Nature & Human Culture.* Daedalus 133, no. 4 (2004): 47-54. http://www.jstor.org.ezproxy.library.yorku.ca/stable/20027944.

CHAPTER ONE

HUMAN UNIVERSALS

Unlike Donald Brown, I am not an expert in the discipline of anthropology or the field of human universals. Brown's book *Human Universals* is my primary guide, however, even with his extensive research in hand, I looked beyond to find context in the universals of music and art. I found mixed opinions about universals and many scholars deny they exist. I disagree and will not debate those differences of opinion, but I will provide references from several disciplines that support my thinking.

Although many scholars have researched the topic of universals, I have chosen Donald Brown as my primary source for understanding because he is peer reviewed and I share his beliefs, i.e., "universals exist and they are important."[9] However, the use of the word "universal" still feels rather inaccurate. I prefer the word "commonality," suggesting that commonalities' are predominant to varying degrees. Donald Brown supports that thought by asserting: "anthropological attention has been riveted more surely by differences between societies than by their commonalities."[10] Anthropological human universals seek to articulate similarity, a counterpoint to difference, which he asserts is the traditional stance of anthropology.

The following five central theses are the foundation of Brown's book:

1. "Universals not only exist, but are important to any broad conception of the task of anthropology."[11]
2. "Universals form a heterogeneous set. A great many seem to be inherent in human nature. Some are cultural conventions that have come to have universal distributions."[12]
3. "The study of universals has been tabooed as an unintended consequence of assumptions that have predominated in anthropology and other social sciences."[13]
4. "Human biology is a key to understanding many human universals."[14]

---

[9] Anthrosource, American Anthropological Association, http://anthrosource.onlinelibrary.wiley.com/hub/results/?search=Donald+Brown%2C+Universals&journal-doi=10.1111%2F%28ISSN%291548-1433

[10] Brown, Donald E. *"Human Universals, Human Nature & Human Culture."* Daedalus 133, no. 4 (2004): 47-54. http://www.jstor.org.ezproxy.library.yorku.ca/stable/20027944.

[11] Brown, Donald E. *"Human Universals."* – 1991, McGraw-Hill. pg. 5

[12] Ibid, pg. 5

[13] Ibid, pg. 6

[14] Ibid, pg. 6

5. "Evolutionary psychology is a key to understanding many of the universals that are of the greatest interest to anthropology."[15]

Categorization of human universals into realms

According to Brown, universals fit into five conventional realms, thus providing organization of the topic. Each realm and their universals are suitable research themes and could inspire music composition. (See table 1.1)

Table 1.1: Brown's universals and their five conventional realms

Realm	Examples of universal (absolute)
Cultural	Myths, legends, body adornment, daily routines, rules, concepts of luck and precedent, the use of production tools.
Language	Grammar, phonemes, polysemy, metonymy, antonyms and an inverse ratio between the frequency of use and the length of words.
Social	Division of labor, social groups, ages grading, the family, kinship systems, ethnocentrism, play, exchange, cooperation and reciprocity.
Behavioral	Aggression, gestures, gossip and facial expressions
Mental	Emotions, dichotomous thinking, wariness around or fear of snakes, empathy and psychological defense mechanisms.

Surprisingly, I found no mention of the biosphere and nature. I imagined that the four classic elements of earth, air, water and fire were universal externalities that all mankind shares, but did not see any mention of this in Brown's realms. This led me to philosophical anthropologist Neil Roughley.[16] A publication of essays titled "Being Humans,"[17] (edited by Roughley) referred to the realm of pre-given universals and "biological human nature."

Pre-given universals are biological properties that humankind is born into or with.[18] This realm recognizes a sphere of existence that is given by nature and has not been constructed or had intervention by mankind, yet consisting of both external and internal paradigms.

[15] Ibid, pg. 6
[16] Roughley, Neil, *Philosophical Anthropology & Ethics* – Duisberg-Essen University, Germany
[17] "Quotations" indicate anthropological titles and terminology in this thesis
[18] Roughley, Neil, *Being Humans, Anthropological universality and particularity in transdisciplinary perspectives,* Afterward, *Human Nature, A Conceptual Matrix,* pg 382, Berlin: Walter de Gruyter. – 2000

Australian philosopher John Passmore also referred to these paradigms but specifically mentioned deserts, wilderness and oceans as pre-given.[19] (See table 1.2)

Table 1.2: Roughley and Passmore's realms and paradigms of pre-given universals

Realm	Paradigm
Biological, pre-given, biosphere	External paradigms – Earth, air, water and fire. (The four classic elements.) Passmore – deserts, wilderness and oceans.
Biological, pre-given properties of human nature	Internal paradigms – reproductive and developmental system, hearing, seeing and senses of smell.

Brown also asserts that many universals do not fall neatly into realms, but can straddle two or more.[20] An example of a universal that simultaneously crosses realms is "kinship." The terms of father, mother, brother, sister, etc., straddle the social, cultural and linguistic realms.

Kinds of universals

Furthermore, Brown describes different kinds of universals, each one having its own set of determinates. There are "absolute" universals, "near" universals, "conditional" or "implicational" universals, "statistical" universals and "pooled" universals. (See table 1.3)

Table 1.3: Kinds of anthropological human universals and their determinates.

Kind	Determinate
Absolute universal	Found among all peoples known to ethnography and history.
Near universal	Possess some few known exceptions.
Conditional or Implicational	If the condition is met, then the universal trait will accompany it.
Statistical universal	May be far from absolute, but occurs in unrelated societies at a rate well above chance.
Pooled universal	A limited set of options exhausts the possible variations from one society to another.

[19] In his book, *Man's Responsibility For Nature*, John Passmore considers external universal paradigms to be desserts, wilderness and oceans. Duckworth, London, 1974, pg. 32, GF 47 P35, Scott.
[20] Brown, Donald E, *"Human Universals, Human Nature & Human Culture."* Daedalus, Vol. 133, No 4, On Human Nature (Fall, 2004) pg. 47-54, Published by The MIT Press on behalf of American Academy of Arts & Sciences.

Table 1.1 lists examples of "absolute" universals, however, when categorizing a universal as "absolute," consideration must be given to the challenges of gathering the supporting data, i.e., "absolute" may not necessarily represent invariability, but it is more certain than a "near" universal. For example, a "near" universal is "fire making." Brown states, "there are good reports of very few people who use fire that do not know how to make it."[21] Brown also mentions the traits of "percussive emphasis with deep-noted instruments and the colours of red, white and black used in rituals around the world" as nearly universal aesthetic traits.[22] As a composer, knowledge of this "near" universal could prove to be invaluable when setting out to create a ritualistic composition. The term "near" universal expresses a caution that suggests recognizable variation, which is often due to the challenges of gathering data and sampling.

A "conditional or implicational" universal can be illustrated when thinking of the persistent abrasion of the fingertips caused when a jazz bass player uses his fingers to pull and press the strings. Calluses inevitably develop in a short time. It happens to all bass players, thus placing this condition into the realm of a "biological pre-given."

A "statistical universal" is drawn from a common experience and Brown's example is found with the name that different peoples give to the pupil of the eye. In several languages (Catalan[23], Latin etc.) pupil is a term for little person with the explanation being from a common experience of seeing oneself in the others eye.[24] Admittedly, Brown regards this phenomenon as "a stretch," but his point is that common experience or perception, rather than cultural particulars can be expressed as "statistical" universals. Music universals are classified as "statistical."[25]

Realms and "kinds of universals" are the basic units of analysis the decompose the continuum of life, experienced by mankind.

---

[21] Ibid, pg 48.
[22] Brown mentions "universal aesthetic traits"–see page 14, Denis Dutton, *Universalism in Aesthetics and Art*.
[23] Catalan is not, as some believe, a dialect of Spanish, but a language that developed independently out of the vulgar Latin spoken by the Romans who colonized the Tarragona area. It is spoken by 9 million people in Catalonia, Valencia, the Balearic Isles, Andorra and the town of Alghero in Sardinia.
https://en.wikipedia.org/wiki/Catalan_language
[24] Pūpilla, 1350-1400, Middle English and Latin, little doll, alluding to the tiny reflections visible in the eye.
[25] Brown, Steven - Jordania, Josef; *Universals in the World's Musics*; SEMPRA, Psychology of Music.
http://www.neuroarts.org/pdf/Brown_Jordania_2013.pdf, (Gradient typologies based on statistical predominance)

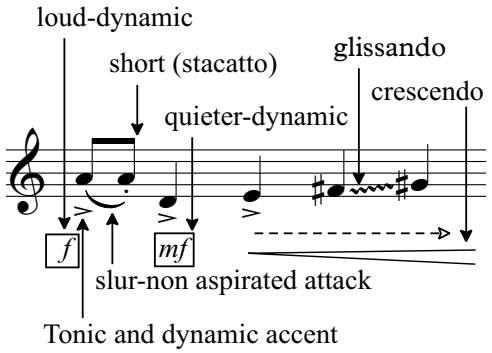
Universal "pools" and their subdivisions connect to sonics—special study

A universal "pool" refers to a limited set of options, thereby exhausting societal variation. Pondering this description led me to contemplate universal "pools" in music such as tuning and scales. Brown cites the *International Phonetic Alphabet (IPA)* as a way to conceive and understand what universal "pools" are. Brown provides this example, which equates the *IPA* to a universal pool:

> *"The international phonetic alphabet, which does not really cover all the possibilities, nonetheless serves to express the idea; it consists of a finite possible set of speech sounds or sound contrasts, from which a selection is found in each language."*[26]

I wondered if Brown considered click languages and that led me to the *International Phonetic Association* and their 2015 *International Phonetic Alphabet* table.[27]/[28] The *IPA* table does include clicks in the category of non-pulmonic consonants. (See table 1.4) The table reminded me of western music notations used to indicate the qualities of expression and sound contrasts. Slurring, accents and staccato are some of the expressive notations that communicate the sound contrasts of Western instrumental and vocal music. (See figure 1.1)

Figure 1.1 Western notations of music expression and sound contrasts



[26] Brown, Donald, E. *"Human Universals, Human Nature & Human Culture."* Daedalus,Vol 133, No 4, On Human Nature (Fall, 2004) pg. 49, Published by The MIT Press on behalf of American Academy of Arts & Sciences.
[27] Not all languages using clicks as phonemes are considered Khoisan. Most others are neighboring Bantu languages in southern Africa: the Nguni languages (Xhosa, Zulu, Swazi, Phuthi, and Northern Ndebele); Sotho; Yeyi in Botswana; and Mbukushu, Kwangali, and Gciriku in the Caprivi Strip, - Google.
[28] https://www.internationalphoneticassociation.org/content/full-ipa-chart

Further research revealed that in the early 1900s English philologist Henry Sweet also sensed a connection between phonetics and music notation. He created a new music notation system from phonetics, and in 1903, the system was published by Charles Abdy Williams as *The Story of Notation*.[29]

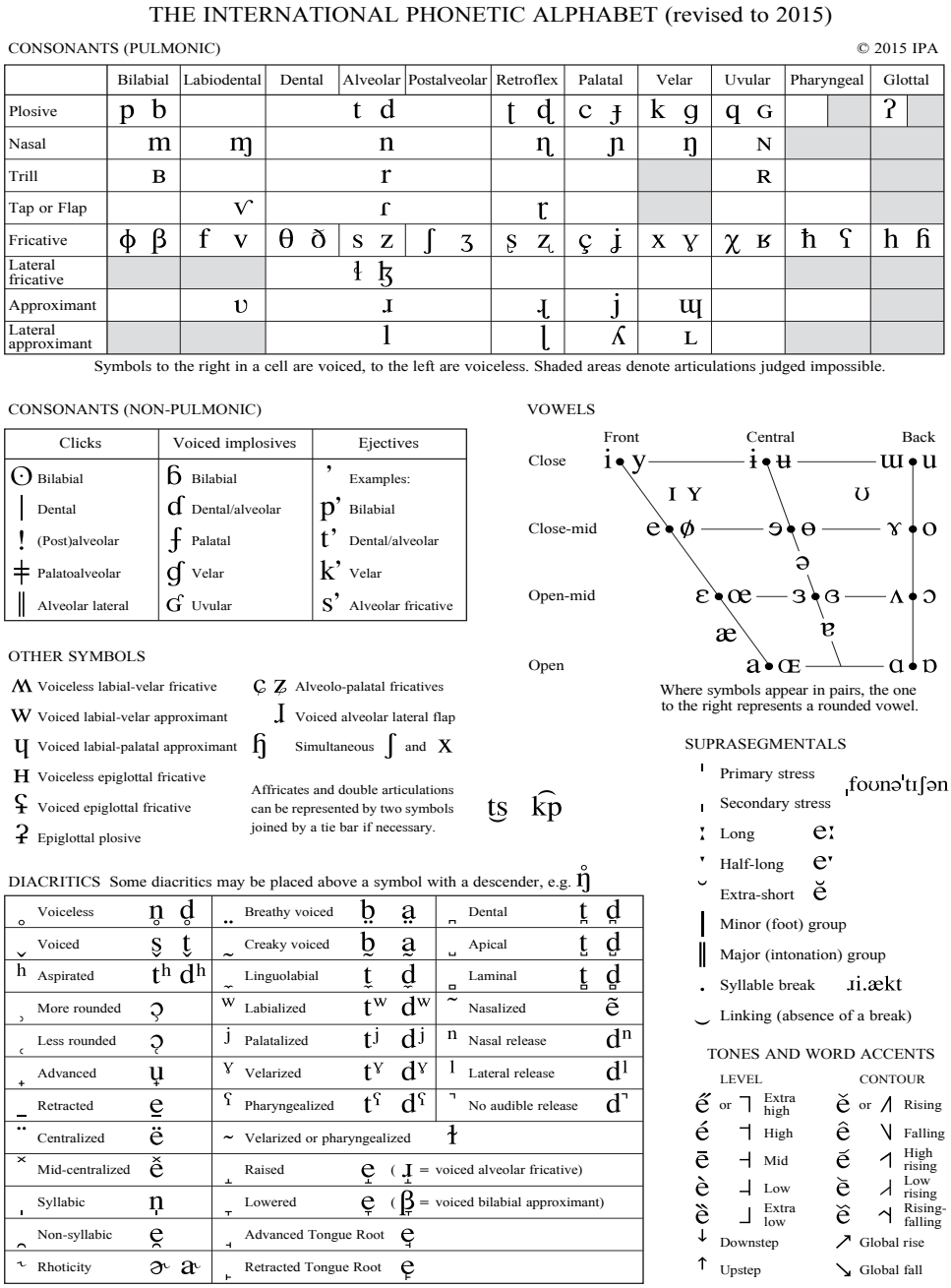
Since 1903, Robert Ladd,[30] Sarah Hawkins[31] and Fred Cummins[32] have done further research equating phonetics with music science and links to their work can be found in the back matter reference. Their work is beyond the scope of this thesis.

(See table 1.4, International Phonetic Alphabet)

[29] MacMahon, Michael K. C., Using Phonetics in a New Musical Notation: *Henry Sweet's manuscript notes of 1904 and 1908*, Dept of English Language University of Glasgow Scotland/UK

[30] Ladd, Robert, *Intonational Phonology*, Cambridge, UK, New York, Cambridge U. Press, Scott, P222 L3 2008.
[31] Hawkins, Sarah, http://www.mus.cam.ac.uk/directory/sarah-hawkins
[32] Cummins, Fred, http://pworldrworld.com/fred/?page_id=14

Table 1.4: The International Phonetic Alphabet[33]



[33] "IPA Table, http://www.internationalphoneticassociation.org/content/ipa-chart, available under a Creative Commons Attribution-Sharealike 3.0 Unported License. Copyright © 2015 International Phonetic Association."

Human universal pools lead to music universals and sound contrasts

The *IPA* table spurred further survey of tunings, heard as frequency pools that can subdivide into groups of frequencies and subsequently form scales that are heard as sound contrasts.[34]/[35] All systems of tuning start with universally available frequencies, while both tunings and scale systems serve as musical differentiators of culture. In 2013 music psychologist Steven Brown and ethnomusicologist Josef Jordania published a gradient typography that lists four categories and seventy putative universals found in cross-cultural musics. Scales fit into their "type two" category of predominant patterns in universal music.[36]

S. Brown and Jordania present their typology of music universals in the category types of "Conserved," "Predominant Patterns," "Common Patterns" and "Range Universals."[37] Each type is a class of musical universal structured in a classification of gradient prevalence beginning with "highly prevalent," "less prevalent," "even less prevalent" and "finally least prevalent or possibly not at all."[38] Their approach to musical classification is "similar to the classification procedures used in several other domains" and is based on the thinking of Bruno Nettl, (1983, 2005). The categories "qualitatively" differ and can be discrete or continuous. For example "scales come in discrete varieties, whereas tempos vary in a continuous manner."[39] Decomposing music into these categories forms a method of analysis, spawning a "cross-cultural general theory of what music is." This comparative musicology method (co-founded by Erich von Hornbostel) emerged in the late 19th century as a branch of psychoacoustics and Gestalt psychology.[40] (See tables, 1.5, 1.6, 1.7 and 1.8,–4 typologies)

[34] Isacoff, Stuart *"Temperament,"* The Idea That Solved Music's Greatest Riddle (New York; Knopf, 2001)
[35] Sethares, William, *"Tuning, Timbre, Spectrum, Scale."*
[36] There is specific research on music universals in the Journals, SEMPRA, *"Psychology of Music"* and *"The World of Music,"* which feature two dedicated editions (Vol.19-1977 and Vol. 26-1984)
[37] Brown, Steven - Jordania, Josef; *Universals in the World's Musics*; SEMPRA, Psychology of Music. http://www.neuroarts.org/pdf/Brown_Jordania_2013.pdf
[38] This gradiant system helps to us to understand why music universals are regarded as statistical.
[39] Ibid, *Universals in the World's Musics,* pg. 232
[40] Von Hornbostel, E. M. (1905/1975). Die Probleme der vergleichenden Musikwissenschaft. *Zeitschrift der*
[38]continued—*Internationalen Musikgeselschaft*, *7*, 85–97. Reprinted with English translation by Richard Campbell as 'The problems of comparative musicology'. In K. P. Wachsmann, D. Christensen, & H. -P. Reinecke (Eds.), *Hornbostel opera omnia* (pp. 247–270). The Hague: Martinus Nijhoff.

Table 1.5: Type 1—"Conserved" universals—all musical utterances[41]

Pattern (Highly prevalent)	**Explanation or example**
Use of discrete pitch	Steady frequency, as opposed to glissando.
Octave equivalence	Pitch class theory. All C's are in the same class.
Transposability of music	Made possible by temperament resulting in constant recognition. Not all music is tempered.
Music organized into phrases	Not all music is organized into phrases.[42] A predominant organization system.
Arousal factors in emotive expression: tempo, amplitude, register	Results may vary; however research by Thomas Fritz indicates happy, sad and fear may possibly be universally recognized musical emotions.[43] I would suggest this is a "near" universal. One should also consider that if the music is in a feature or background context results may be less consistent.

Type 1 universals "apply to all musical utterances or phenomena…some of them are shared with non-music systems as well."[44] (See table 1.5)

Type 2 universals "describe predominant patterns in musical cultures…and need not apply to every musical utterance, but should apply to all musical systems or styles.[45] Some components may even lack these musical properties entirely. Emphasis is placed on the collection of these patterns, rather than on any singular component or property of music." (See table 1.6)

Type 3 universals "are common patterns that occur in many music cultures, but by no means all music cultures.[46] Speculation posits that possible influences for variation are rooted in historical (cultural) contact such as common religious practices or politics." (See table 1.7)

[41] Conserved universals are not unique features of music as they are shared with non-musical systems. They most likely have their origin in biological factors controlling music production and perception.
[42] Huron, David, *"Sweet Anticipation, Music and the Psychology of expectation*," pg 281, iBooks, MIT Press, 2006
[43] Fritz, Thomas, "*The Dock-in Model of Music Culture and Cross- cultural Perception,"* Music Perception, Vol 30, No. 5, (pg. 513) University of California Press, (2013)
[44] Brown, Steven - Jordania, Josef; *Universals in the World's Musics*; SEMPRA, Psychology of Music. http://www.neuroarts.org/pdf/Brown_Jordania_2013.pdf
[45] Ibid, *Universals in the World's Musics*.
[46] Ibid, *Universals in the World's Musics*.

Table 1.6: Type 2—Predominant patterns all systems or styles[47]

Pattern (Less prevalent)	**Explanation**
Scales that have seven or fewer pitches per octave	Scales are indicators of cultural difference. The Ethiopian pentatonic "Ambassel" scale crosses cultural boundary; it is the same as the Japanese "Kumoijoshi" scale. (1, b2, 4, 5, #5)
Predominance of precise (isometric) rhythms in music	With the advent of technology, looping drumbeats is dominant in contemporary music worldwide. Crosses genres with ease.
Divisional organization of durational/rhythmic structure	Not all music is organized into phrases.[48] A predominant organization system.
Use of motivic patterns in melody generation	Not all music is organized into phrases.[49] A predominant organization system.
Use of idiophones and drums	Used commonly as timekeepers by African, First Nation and Aboriginal cultures. The Orff system uses tuned idiophones.
Religious/ritual context for music-making	Koji Matsunobu asserts that spirituality is a shared realm of human music experience, rather than culture specific dimensions.[50]
Use of verbal texts in vocal music	Songwriting
Communication-promoting or social-positive attitude towards music	Songwriting

Table 1.7: Type 3—Common patterns-many musical systems or styles

Pattern (Even less prevalent)	**Explanation**
Small tempo range for any given musical form/style	Polka is usually about 130 BPM, Hip Hop is between 85 and 115, A march is usually about 120, Techno is 120 to 60, etc.
Predominance of syllabic singing	The key connector of poetry to musical rhythm and tempo. Rap music is a very current example
Use of aerophones	Whistles and flutes were originally made from bones as a compliment to idiophones.
Voice/instrument cross imitation.	A method of dialogue exchange. Found in jazz
Use of acoustic depiction in music	Imitation of natural sounds with instruments
Association of dance with music	Rhythm synchronizes people in movement

[48] Huron, David, *"Sweet Anticipation, Music and the Psychology of expectation,"* pg 281, iBooks, MIT Press, 2006
[49] Ibid, MIT Press, 2006
[50] Matsunobu, Koji, *"Spirituality as a Universal Experience in Music,"* The Journal of research in music education, Vol. 59, No 3, October 2011, SAGE Publications.

Table 1.8: Type 4—Range universals, a discrete set of possible states for all musical systems/styles

Pattern (Least prevalent & possibly not at all)	**Explanation**
Measured vs. unmeasured rhythmic vs. polyphonic texture types	A steady beat vs conducted Many sounds simultaneously vs one sound (homophonic) These variables are principles that interwoven commonly to achieve variety in music
Monophonic vs. heterophonic vs. polyphonic texture types	One single note melody line vs harmony. (more than one note) Many sounds simultaneously vs one sound (homophonic) These variables are principles that interwoven commonly to achieve variety in music
Solo vs. group performance arrangements	In the vocal category this is commonly known as acapella vs group
Ostinato vs. strophic (structured) vs. through-composed sectional arrangements	Repeating note sequence vs repeating verse or chorus with different words vs non repeating musical structures

Type 4 universals **"**Range universals describe the full range of discrete possibilities for a particular category of musical behaviour."[51] Sub-categories such as monophonic, heterophonic, homophonic and polyphonic are included.[52] All the universals in the typographies communicate "cross-cultural trends and generalizations."[53] Examining "pools and subdivisions" invites further research into all units of universal categorization, but that is beyond this theses. (See table 1.8)

Emic and etic distinction of universals

In the early '50s linguist Kenneth Pike recognized "emic" and "etic" distinction, advancing ethnologic research structure from atomistic (isolated), to structural and then strategic.[54] Derived from the adjective phonemic, "emic" universals distinguish features from natives within a culture, while "etic" (phonetic) considers pre-exiting cross-cultural or outside

[51] Ibid, *Universals in the World's Musics,* pg. 233
[52] Monophonic; *a single note melody*, Heterophonic; *simultaneous variation by more than one voice of a single melody,* Homophonic; *accompanying parts moving with the melody,* Polyphonic; *more than one note at a time.*
[53] Ibid, *Universals in the World's Musics,* pg. 233
[54] Alvarez-Pereyre, Frank &Arom, Simha, *Ethnomusicology and the Emic/Etic Issue*, The World of Music, Vol 35, 1993 Jstor

theories. Most analysis blends the two distinctions. This made me think of the early days of jazz—many unschooled musicians could play the blues, an "emic" and native cultural research distinction, while an "etic" distinction represents the blues with notation and theory from outside the culture. W.C. Handy (1873-1958), an American composer, known as the "Father of the Blues" is credited with giving the American blues its twelve-bar form, which is notated in his song "Memphis Blues,"-1909. Now the blues is a nearly-universal song form. Many ethnomusicologists (Springer 1956, Nettle 1958, Merriam 1964) speak of the debt their research owes to linguistics, but rarely are emic/etic distinction discussed.[55] Donald Brown states "emic universals are probably more rare than etic universals".[56]

Ethnomusicology and universal traits

George Herzog characterized ethnomusicology as an "orphan discipline" (Herzog, 1942) and as a "stepchild" (Rhodes, 1956) of musicology and cultural anthropology. Dating back to the early 1900s, ethnomusicology has been concerned with an interdisciplinary range of humanistic, scientific and cognitive research. In 1951 Charles Seeger put forth a foundation for research that Nettl and Merriam endorsed. Regardless of that foundation, the boundaries remain unclear.[57] There are many divergent views of music universals within ethnomusicology, but music semiologist Jean-Jaques Nattiez offers a path towards unification, suggesting that before reflecting on any universal trait of music, one must first consider what music really is.[58]

Through technological manipulation all sound can be considered musical or even music. For example, John Cage's "Radio Music" (1956), a collection of radio dial scans, has both a score and analysis, but it is on the periphery of traditional Western music. People outside of Western societies distinguish between music and non-music with differing criteria.[59] Ethnomusicologist, Bonnie C. Wade states that "people make music meaningful and useful in their lives…that is what ethnomusicologists are interested in."[60] It should be noted that seeking

[55] Ibid, *Ethnomusicology and the Emic/Etic Issue, pg. 15*
[56] Ibid, pg. 48
[57] Shelamy, Kay Kaufman, *"Ethnomusicology, History, Definitions, and Scope,"* Garland Publishing, Inc. ML3799H58-1992
[58] Music semiology is the study of signs as they pertain to music on many levels.
[59] Vickery, Lindsay, *John Cage, Radio Music, Analysis*, Western Australian Academy of Performing Arts, Edith Cowan University, "2012.pdf." http://www.lindsayvickery.com
[60] Wade, Bonnie, *"Thinking Musically,"* Oxford University Press, ML3798W88, Scott, pg. xvi-preface, 2013

universality within music is a pursuit of occidental (Western) musicology. Music is not a singular universal concept, because it is determined culturally, however musics, music phenomena, sound phenomena and sound contrasts that are musical do exist.[61] An example of this is found with the indigenous tribe called the *Mapuche* (located in South central Chile and South Western Argentina) and their performance of *Tayil*, which is only done for special social circumstances. They do not know the word music and distinguish *Tayil* from songs (öl), even though *Tayil* has organized pitches that can be notated as Western music.[62]

Bruno Nettl and David McAllester assert that universals involved in the conceptualization of music are difficult to isolate, and they name the supernatural and religion as utilizing music to transform experience, a universal trait that they say can be found everywhere.[63]
Nettl (2000) and François-Bernard Mâche (2000, 2001) relate musical universals and human universals by pointing out that the origins of music also extend to human origins. Our world contains more than 4,500 species, but only Homo sapiens have the ability to follow precise rhythmic patterns that enable group singing, drumming and dancing.[64]

There is no absolute one-size-fits-all description of music, but one could say that music is made up of sonic artifacts and utterances in organization. However, cultures do not universally agree on what makes up those components. Wade says, "music is a process" and it is in the mind of the listener where the sound is realized as either music or non-music.[65] As a composer I believe my job is to organize contrasting sounds and make what I consider to be "high quality" music, to do that I want to understand the origins of humanity and music, but there are research challenges.

Methodical limitations surrounding the study and definition of universals

The overall concept and classification of universality was a philosophical discussion that began with Plato and the theory of ideas evolving from influence by Socrates, Parmenides,

[61] Nattiez, Jean-Jacques, The World of Music, *"Under what conditions can one speak of the universals of music?"* Vol. 19. No ½ 1977, pg. 95
[62] Ibid, Vol.19. No ½ 1977, pg. 94
[63] Nettl, Bruno, *"On the Question of Universals,"* The World of Music, Vol.19 No. ½ 1977, pg 5
[64] Brown, Steven - Jordania, Josef; *Universals in the World's Musics*; SEMPRA, Psychology of Music. http://www.neuroarts.org/pdf/Brown_Jordania_2013.pdf
[65] Wade, Bonnie, *"Thinking Musically,"* ML3798W88, Scott, pg. 6-7.

Heraclitus and Pythagoras.[66] Now, anthropology has become "the study of mankind," and is tasked with demonstrating universals. It is difficult since anthropological universals "generally confines discussion to action, thought and feeling."[67] It is important to note that anatomical features of mankind are very rarely included in anthropological discussions.[68]

Anthropological universals are concerned with the deep processual innate commonalities that serve as a natural counterpoint to difference within our species. Nobody can know all features and conditions of all cultures and societies, and so statements about universality cannot be absolute even though there is a group of universals termed as "absolute." That distinction can be misleading, but with an understanding of the challenges toward precise demonstration of universality, it is accepted. S. Brown and Jordania assert that, "any concept of universality that requires inviolable applicability to every moment of every instance of music from every culture is doomed to failure from the start."[69] Their approach to proving universality is likely transferrable to any discipline that discusses universals.

Challenges in demonstrating universals range from data samplings taken at different times, to underfunding and not enough comparative locations. Also, anthropological attention has mostly been focused on manifest differences, rather than the innate commonalities of mankind, resulting in an imbalance of research. D. Brown speculates that due to this neglect, many universals await identification. As mankind, culture, society and technology evolve, many "new universals" will form, be discovered and then categorized. Universals remain a controversial topic in anthropology and the prominent anthropologist Clifford Geertz illustrates that point by maintaining that universals have little significance, if they exist at all.[70]

---

[66] Weissmann, Hans, Asriel, *"On the Concept of Universals."* Philosophy and Phenomenological Research, Vol.27, pg. 274, Dec. – 1966.
[67] Brown, Donald E. "Human Universals," pg. 39-41, Mc Graw-Hill, – 1991.
[68] Ibid, pg. 39, Mc Graw-Hill, – 1991,
[69] Brown, Steven - Jordania, Josef; *Universals in the World's Musics*; SEMPRA, Psychology of Music. http://www.neuroarts.org/pdf/Brown_Jordania_2013.pdf
[70] Platt, John,R. *"New views of the nature of man,"* The impact of the concept of culture on the concept of Man, Scott-BD 450-P55, Clifford Geertz, pg. 93-118. Chicago: University of Chicago Press. – 1965

Universalism in aesthetics and art

Since *Humanasonics* is art music,[71] I further explored how universals are viewed in art and aesthetics. The previous mention of "universal aesthetic traits" (pg.5) led me to consider the writings of art philosopher Denis Dutton, who states that art is a "cultural universal" and there is universalism in aesthetics.[72] To support his assertion, Dutton cites the following three aestheticians:

1) The Russian novelist Leo Tolstoy "who believed the universal essence of art is in its communicative capacity to tie people to one and other."[73] (1959)

2) The German poet and philosopher Frederich Schiller "who argued that art derives from a human impulse to play."[74] (1967)

3) The English art critic Clive Bell "who contended that the essential nature of art was expressed as significant form."[75] (1914)

According to Dutton, these diverse descriptions of cultural universality in art have two aspects in common:

1) "They pre-suppose or posit the existence of a fundamental human nature"

2) "Art will itself have a predictable content identifiable cross-culturally."[76]

Dutton lists and describes seven universal features of art that he considers to be cross-cultural, cautioning that these features are "not necessarily in all art," and further notes, "it would be difficult to imagine a social practice that was characterized by most of them, which is not art in some sense." (See table 1.9)

[71] I consider "art music" to be music that does not focus on commercial success as a primary goal.
[72] Dutton, Denis, Aesthetic Universals, The Routledge Companion to Aesthetics, 2002, http://www.denisdutton.com/essays.htm
[73] Ibid, Dutton, Denis
[74] Ibid, Dutton, Denis
[75] Ibid, Dutton, Denis
[76] Ibid, Dutton, Denis

Table 1.9: Denis Dutton lists seven universal features of art.

Feature	Description
Expertise and virtuosity	Artistic performance requires specialized skill.
Non-utilitarian pleasure	The object is a source of pleasure.
Style	Recognizable style derived from rules of form and composition.
Criticism	Results from an indigenous critical language of judgment and appreciation. It can be simple or complex.
Imitation	Art objects represent or imitate real or imaginary experiences
"Special" focus	Works of art and artistic performance are frequently bracketed off from ordinary life, creating a special experience.
Imaginative	This experience is shared by both the creator and the recipient

Universal people

Whether or not universals are discussed in ethnomusicology, aesthetics and art, or any other discipline, according to D. Brown, they exist in people. Chapter six in *Human Universals* is titled *The Universal People,* and it has a different style than the rest of the book as it conveys surface or substantive—tangible and easily felt—universals that are considered to be "absolute."[77] I speculate that Brown chose this accessible approach as a way to help increase the nonstructural awareness of universals in order to amplify the "feeling" of mankind's universality. Music can also help to amplify that accessibility through emotion and storytelling. In the following table, D. Brown presents accessible descriptions that provide an easy way to grasp the commonalities found in *The Universal People*.[78] (See table 1.10)

[77] Brown, Donald E. *"Human Universals,"* pg. 141, Mc Graw-Hill, –1991,
[78] Brown, Donald, E. "Human Universals, Human Nature & Human Culture." Daedalus,Vol 133, No 4, On Human Nature (Fall, 2004) pg. 48, Published by The MIT Press on behalf of American Academy of Arts & Sciences.

Table 1.10: Brown's assertion of characteristics in *The Universal People*[79]

Language that embodies culture: enables organization, response, distinguishes *emic* conceptualization from *etic*, symbolic vocalizations of fear similar to animals.
Logical notions such as not, and, same, equivalent, and opposite.
Symbolic communication with gestures and facial expressions.
Motivation from sexual attraction or jealousy, Oedipus complex is part of male psychology.
Dance and music, which includes melody, rhythm, repetition, redundancy and variation, which is seen as creative.
Child-play and play-fight, building skills that will be useful in adulthood.
Children everywhere acquire language with prodigious skill, but adults do not.
Above the age of infancy everyone employs gestures and such elementary logical concepts as 'not' 'and' 'or' 'kind of' 'greater/lesser' 'part/whole' etc.; everyone classifies; everyone has likes and dislikes.

Donald Brown's closing thoughts on universals[80]

> *"We can look forward to the time when a great many cultural features are traced beyond the time and place of their invention to the specific features of human nature that gave rise to them. The study of human universals will be an important component of that task."*[81]

[79] Ibid, pg. 130-140, Mc Graw-Hill, – 1991,
[80] Pinker, Steven, An alphabetical list of Human Universals can be found in *"The Blank Slate."* pg. 435-439.
[81] Brown, Donald, E. *"Human Universals, Human Nature & Human Culture."* Daedalus,Vol 133, No 4, On Human Nature (Fall, 2004) pg 48, Published by The MIT Press on behalf of American Academy of Arts & Sciences.

Preparation for the process of composition

My understanding of human universals began with research in the discipline of anthropology and Donald Brown's writings on the topic. In addition ethnomusicology and aesthetics have also provided valuable context in preparation for composition. Chapter one is a mere glimpse at those aspects of universalism that I deemed necessary to inspire the music of *Humanasonics.*

Outline of *Humanasonics*—the inspiration, context and compositions

Humanasonics is a suite of music that contains four movements and each one will be inspired by a selected anthropological human universal. D. Brown states "many new universals will form and be categorized." That thought led me to suspect that cultural diversity may be a "new" universal condition for humanity. In my community of Toronto there is a diverse mixture of Ethiopian, Indian, Asian, Greek, Caribbean, Irish, Italian, Romanian, Syrian and many more, so I felt that "cultural diversity" could be the universal condition that inspires Movement 1, *Transcontinental Soul.* UNESCO's *Universal Declaration on Cultural Diversity* supported my suspicion.[82] Furthermore, research shows that diversity was greatly enabled in the decades following World War II with the advent of uninterrupted transcontinental air travel, made possible by the DC-3 airplane, enabling people and cargo to traverse oceanic divides in just hours.[83] The benefits and challenges of human dispersion have now become exponentially accelerated due to further technological advancement coming with the third and fourth industrial revolutions.[84] It seems that "cultural diversity" is now a ubiquitous human universal condition.

"Play" is the universal trait that inspires Movement II, *Play.* "Play" is also the universal method of learning and all children from their early childhood practice it. Play provides developmental experiences in the areas of adversity, gender, culture, recreation, therapy and education.[85]

"Water" is the pre-given universal condition inspiring Movement III, *Riverbed*. Research from UNESCO surveys the state of drinking water for humanity and the ten-year span from 2005 to 2015 was named *The International Decade of Action -"Water for Life."*

---

[82] UNESCO, *"Universal Declaration on Cultural Diversity,"* – UN Documents, Gathering A Body Of Agreements.
[83] DC-3, http://www.boeing.com/history/products/dc-3.page
[84] Rifkin, Jeremy, *"The Third Industrial Revolution,"* iBooks-pg 133, Palgrave-Macmillan, 2011.
[85] Sheridan, Mary, *"Play in Early Childhood."* 3rd edition 1977-2011, Routledge

Currently 85% of mankind still lives in the driest areas of the planet and 1.7 million people live in river basins where depletion due to drawdown is not rechargeable.[86]

"Kinship" provides inspiration for Movement IV, *Kinship*. The traditional anthropological kinship principles of descent (unilateral, cognatic and ambilineal) are currently being blurred by new reproductive technologies that are adding complexity to the biological underpinning of kinship.[87] Procreative possibilities like "invitro," "gamete donation" and "maternal surrogacy" are forcing anthropologists to rethink their models of kinship, resulting in a new universal relationship between nature, culture and biological technologies.[88] Anthropologists are charged with the study of "kinship" and like "universals," the field suffers from a lack of interest and current research.

These four universal themes will inspire the jazz music of *Humanasonics.* Furthermore, my belief is that improvised music, i.e., jazz often seeks a balance between composition and improvisation, which may also serve to reflect a balance between "commonality and diversity." The themes of *Humanasonics* are classified in the following table:
(See table 1.11)

Table 1.11: *Humanasonics*—classification of universals

Universal	**Classification**
Cultural Diversity (A new universal condition)	Absolute, cuts across the cultural and social realms. Recognized by UNESCO, new paradigm. *It* possesses *etic* and *emic* distinction.
Play	Absolute and cuts across the behavioral and mental realms. Experienced in all cultures and societies, represented culturally. It possesses *etic* and *emic* distinction.
Water (Pre-given)	A compound substance that is a pre-given universal. Subdivides into hydrogen and oxygen, H_2O. It possesses *etic* and *emic* distinction.
Kinship	Simultaneously social, cultural and linguistic. It possesses *etic* and *emic* distinction.

[86] Unesco,"International Decade for Action *"Water for Life"* 2005-2015. Focus Areas." http://www.un.org/waterforlifedecade/water_and_sustainable_development.shtml
[87] Dumont and Parkin, *"An Introduction to Two Theories of Social Anthropology,"* New York: Berghahn Books, 2006. Scott Stacks - GN 487 D86 2006
[88] Strathern, Marilyn, *"Reproducing the Future,"* Essays on Anthropology, *Kinship and the New Reproductive Technologies*, New York, NY, Routledge, – 1992

CHAPTER TWO

HUMANASONICS

(Movement 1)

TRANSCONTINENTAL SOUL

Movement I is inspired by cultural diversity, a condition so important that UNESCO's "*Declaration on Cultural Diversity"* classifies it as a "new paradigm" and provides imperative recommendations for improved global discussion of this relatively new human universal condition.[89] *Transcontinental Soul* derives its reference and inspiration from an era that increased cultural diversity. Post World War II, specifically the '50s was an era when international travel became very accessible enabling increased immigration. The DC-3 airplane (1936) moved people and cargo across continents and oceans with ease when compared to oceanic travel.[90] People were on the move, rebuilding their lives in new places. After WWII, government policies around the world changed, further fueling immigration. For example, in 1950 the Canadian Department of Citizenship and Immigration was formed and Germans were no longer considered "enemy aliens." In 1951 agreements between Canada, India, Pakistan and Ceylon were signed allowing certain numbers of their citizens in, and *The Geneva Convention Relating to the Status of Refugees* was adopted by the United Nations.[91]

Considering this history helped me to understand the era, which then led me to the jazz music that underscored it. Many people regard 1959 as the year that changed jazz due to the release of Miles Davis—*Kind of Blue*, John Coltrane—*Giant Steps,* Dave Brubeck—*Time Out* and Charles Mingus—*Ah Um*. It has also been called the most creative year in jazz. That awareness attracted me to the core musical inspiration for Movement I, Charles Mingus's composition titled *Better Git It In Your Soul*, (BGYS).[92] This gospel-inspired composition from the recording *Ah Um*[93] [94] motivated me to capture some of that 1950s spirit within my own composition titled *Transcontinental Soul* (TS), my tribute to cultural diversity.

---

[89] http://unesdoc.unesco.org/images/0012/001271/127162e.pdf

[90] The DC-3 made air travel popular and airline profits possible. It is recognized as the greatest plane of its time. Many remain in service. http://www.boeing.com/history/products/dc-3.page

[91] The Convention, (status of refugees) which entered into force in 1954, is by far the most widely ratified refugee treaty, and remains central also to the protection activities of the United Nations High Commissioner for Refugees (UNHCR).http://legal.un.org/avl/ha/prsr/prsr.html

[92] https://www.allaboutjazz.com/1959-the-most-creative-year-in-jazz-various-artists-by-nathan-holaway.php

[93] Mingus, Charles, *Ah Um* was one of fifty recordings chosen by the Library of Congress to be added to the National Recording Registry in 2003. Columbia, – 1959.

The Composition

One of the most appealing aspects of music can be rhythm because it has the ability to synchronize groups of people.[95] A 6/8 rhythm that is similar to *Better Git It In Your Soul* is the driving force for *Transcontinental Soul*. Both compositions establish their "rhythmic motor" with a strong accent on beats one and four during the four-bar bass intro. However Mingus's intro stays in 8th notes, where *Transcontinental Soul* contains two layers of "rhythmic grid", using both 8th and 16th notes, resulting in more persistent propulsion. Analyses of the four-bar introductions highlight several differences and commonalities. (See figures 2.2 & 2.3)

Figure 2.2: Analysis—bass intro, *Transcontinental Soul*

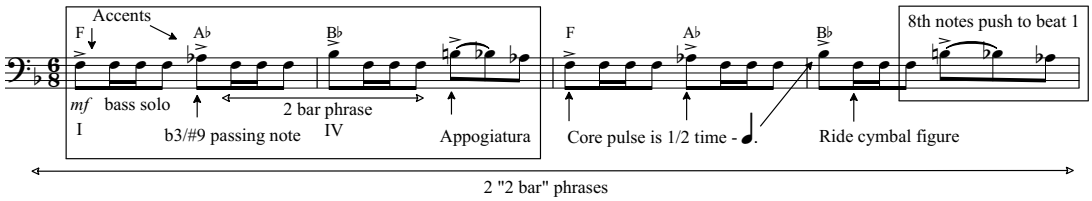
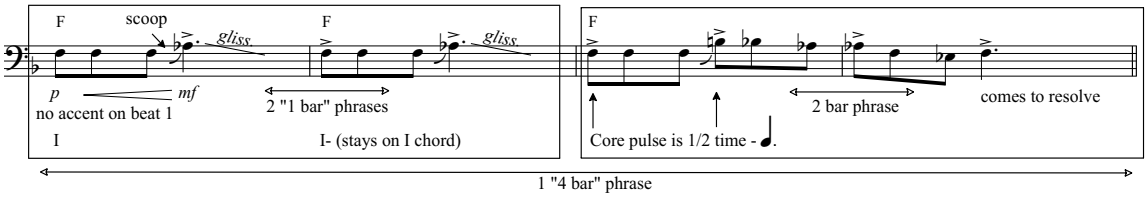


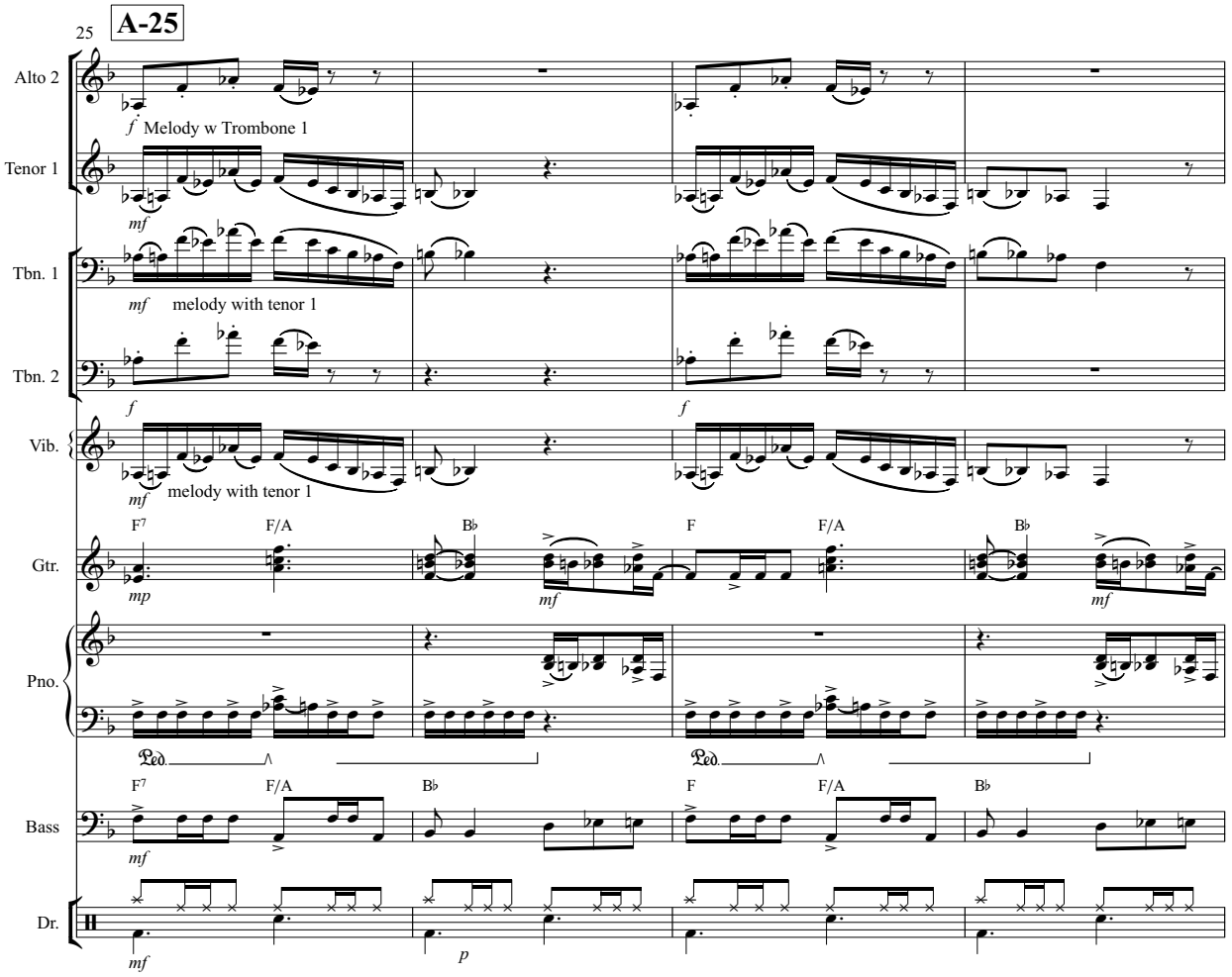
Figure 2.3: Analysis—bass intro, *Better Git It In Your Soul*



Both introductions share a common upright bass sound that creates a similar effect for the average listener, although the "guttural sound" that Mingus pulled from his bass remains very unique and unmistakable. My goal was to hint at the '50s, paying homage to the rhythmic feel that Mingus achieved. To add my own modern "tight" approach I indicated gestures such as slur, staccato and accent to intensify the ensemble's rhythmic motor. For example, at A-25, tenor sax, trombone and vibes play the melody while alto two and trombone provide support with staccato rhythmic points on the first 8th notes, creating a very strong pulse in the melody. (See figure 2.4)

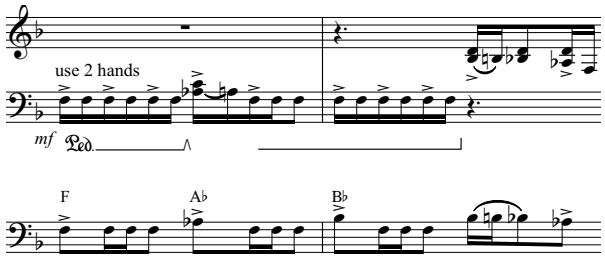
[94] Mingus, Charles, Ah Um, http://www.lordisco.com.ezproxy.library.yorku.ca/tjd/LeaderDetail?lid=17471
[95] Brown, Steven - Jordania, Josef; *Universals in the World's Musics*; SEMPRA, Psychology of Music, pg. 230 http://www.neuroarts.org/pdf/Brown_Jordania_2013.pdf

Figure 2.4: *Transcontinental Soul*—Using gestures the band becomes the rhythmic motor



Both compositions use a single-note drone with accents and slurs that evoke a spiritual feel, while also making the rhythm very cohesive and persistent. (See figure 2.5)

Figure 2.5: *Transcontinental Soul*—Piano and bass drone effect evokes a spiritual feel



The following table presents a number of other commonalities and differences that are found when comparing *Transcontinental Soul* and *Better Git It In Your Soul*. (See table 2.12)

Table 2.12: *Transcontinental Soul* and *Better Git It In Your Soul*—Commonalities and differences in the bass intros

Commonalities	**Difference**
Both in F	*BGYS*-stays on tonic | TS-goes to IV chord in bar 2
Both in 6/8 and both at the same tempo ♩.=85 bpm	*BGYS*-only uses 8th's and dotted 8th's *TS*-uses dotted 8th's, 8th's and 16th's and the bass plays the ride cymbal rhythm
Both go to Ab on beat 4 of bar 1	*TS*- goes back to F for beat 5 and 6 of bar 1
Core pulse in 2	*TS*- uses this for a back beat
Jazz 6/8 feel	*TS*- the large and constant back beat makes the music feel like it's in ½ time in the kick and snare drum, with a double time clockwork feel in the cymbal
Both intros are played by the bass	Today's basses are set up well enabling a more nimble playing style.
Both intros are 4 bars long	*BGYS* phrase is 1,1,2 | TS is 2,2

Mingus's activism is also inspiration

Much of the '50s -'60s jazz music was protest music associated with the Civil Rights Movement.[96] Mingus's composition *Fables of Faubus* is an example of his social commentary through music. It reflects Arkansas Governor Orval E. Faubus's decision (1957) to send out the National Guard with authorization to prevent integration of nine black students at the Little Rock High School.[97] Nina Simone, one of the era's strongest activists considered "musical activism" to be the highest purpose in one's artistic life.[98] Similarly to both these "activist artists" and others, social commentary also inspires *Transcontinental Soul*. To proclaim the message and attract an audience with some core compositional determinations, I prioritized building in strong emotion

[96] *How Jazz and The Civil Rights Movement came together in the 1960's,* Coltrane, Mingus & Simone, http://blankonblank.org/2015/05/jazz-civil-rights-movement/

[97] When I listen to *Fables of Faubus* I am left with the feeling that Mingus thought Orval Faubus was a bumbling fool. That may have to do with a quirky melody that reminds me of jazz cartoon music.

[98] Simone, Nina, *What Happened Miss Simone?* – www.netflix/watch/70308063,

using rhythm, a lyrical melody and a form that has familiarity, but yet is unpredictable through its careful use of odd phrase lengths that result in unexpected cadences.

***Transcontinental Soul*—Form**

Both compositions share a song form of **A, A, B, A**, but the phrase lengths are different. Mingus's uses 8 bar phrases for each section totaling 32 bars, but *Transcontinental Soul* employs **A** sections that are oddly 10 bars, a **B** section of double length and then a final **A** section that is the same length which I believe provides a concise theme summary. (See table 2.13)

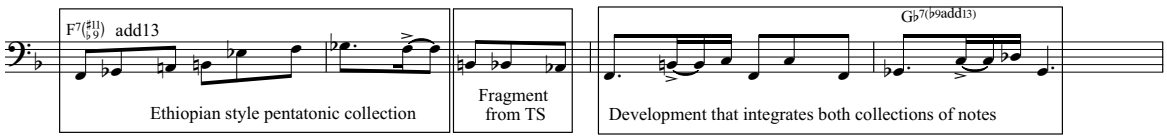
Table 2.13: *Transcontinental Soul and Better Git It In Your Soul* —comparison of form and phrase length

	A	**A**	**B**	**A**	**Total**
BGYS	8	8	8	8	32 bars
TS	10	10	16	8	44 bars

The duration of *Transcontinental Soul* is approximately five minutes and Mingus's exceeds seven. Since *Transcontinental Soul* is the theme for *Humanasonics,* I felt that it should be shorter than Mingus's composition. At bar number 165 I wanted to create the aura of noticeable "cultural difference" by using a scale. Inspired by Ethiopian jazz artist Malatu Astatke and his use of pentatonic scales, I sought to reference this non-western culture and introduce musical diversity and some poetic–musical storytelling.[99] The introduction of this tonality also serves to foretell of the Ethiopian jazz influence that lies ahead in *Humanasonics*. (See figure 2.6)

[99] Malatu Astatke is considered to be the father of Ethiopian jazz.

Figure 2.6: Ethiopian pentatonic sound merges with *Transcontinental Soul*.



The transition to Movement II begins at bar 165 and evokes the experience of diversity. The pentatonic scale and hand drums create a sonic safari suggesting the sensation one might get flying over the Ethiopian countryside. The abrupt ending of the piece symbolizes a dramatic exit, perhaps a parachute jump from the plane. It sustains anticipation; while awaiting the resolve that is about to come from the tumbling zig-zag decent found in the intro of Movement II, *Play.*

CHAPTER THREE

HUMANASONICS

(Movement II)

PLAY

To most people, the word play suggests enjoyment—a welcome and necessary diversion from work and responsibility. In Western music, play also means to play an instrument or music. When it comes to composition, play can be a way to liberate oneself, try new ideas and take chances. Movement II, *Play*, is my attempt to fearlessly experiment with new compositional techniques and see what happens. The techniques I wanted to try were ultrapolation, infrapolation, limited intervals, hexachords, theme with variation and melodic linking.

Description of techniques

Ultrapolation involves defining a collection of principle notes, such as a triad, and then adding a new note above each principle note, and conversely infrapolation indicates the addition of a note added below. This creates a harmonic zig-zag effect.

Limited intervals involve selecting two notes and reorganizing them in as many different ways as possible. The selected notes can be transposed to any octave or placed in any order. This shifts compositional emphasis to rhythm, range, dynamics, orchestration, vertical structure, linear development, gestures or any other compositional tool imaginable. An example of this technique is found in *Play*, between bars fourteen and eighteen. Limited interval technique is an effective way for composers to learn the range of the instruments as it can be applied to one instrument, a string quartet or even a full orchestra.

Hexachords involve selecting a six-note "pool" to form a hexascale and then stacking the remaining five notes of the hexascale on top of each root. Counting intervals from within the hexascale will determine the degree of tonal contrast available when modulating it. However, between bar sixty-seven and eighty-three I used the interval counts in a different way, intending to create some unusual linear melodic development that graduates from close to distant intervals. I also sporadically injected the motifs that were previously developed with the limited interval technique. By carrying those motifs forward the music improved its coherence.

Theme and variation can be more effective when an antecedent phrase finds its variation played by another instrument as the consequent phrase. The technique of melodic linking connects a theme and its variation across the instrument groups or sections of the orchestra.

The conscious attempt to involve all these different techniques within one movement suggested an outcome that could sound like a forced exercise. The inspiration for practicing "play" persisted, leading me to the thought of connecting Movement II to Movement III as a smoothing device. To do that, I referenced the six-note antecedent melodic phrase from Movement III and used it to form a foundational note-pool for Movement II. That also formed the hexascale that I needed for executing the hexachord technique.

All of these techniques allowed me to create, but the constant need for musical coherence forced me to adapt them to suit my sense of aesthetic. Theme, variation and melodic linking were the primary techniques that brought all these separate ideas together to build commonality.

Introduction

Play begins with a D augmented chord expressed as a descending arpeggio. To give this introduction a feeling of random tumbling I alternated ultrapolation and infrapolation around the principle chord tones. The rhythm is in triplets while harmonic ultrapolation and infrapolation alternate between the strong and weak beats of the triplet in two-note patterns. (See figure 3.7)

Figure 3.7: *Play*—Ultrapolation and infrapolation of the introductory D augmented triad

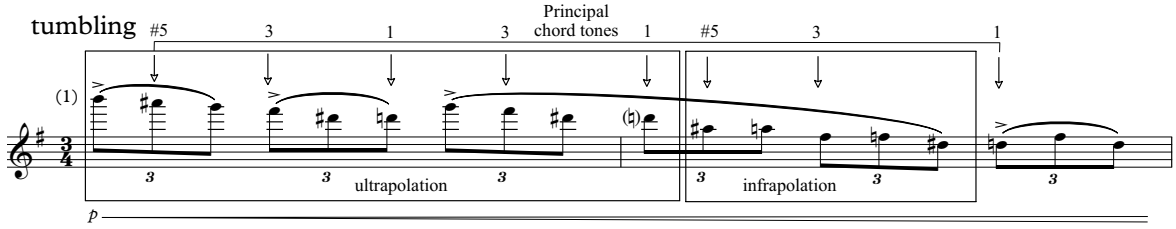
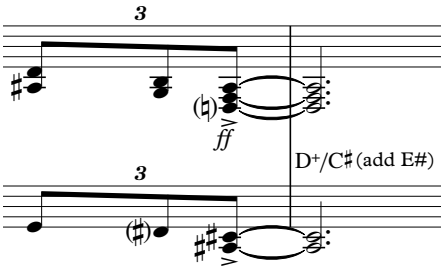


Figure 3.7 is the first of five variations that are orchestrated across the ensemble to create a cascading effect that starts as a monophonic voice and ends in ensemble polyphony, further illustrating a steady increase in momentum towards the resolution.

The final chord after this free-fall is equivalent to a humorous "harmonic splat" (D+/C# add E#) providing resolution. (See figure 3.8)

Figure 3.8: *Play*—The humerous "harmonic splat"



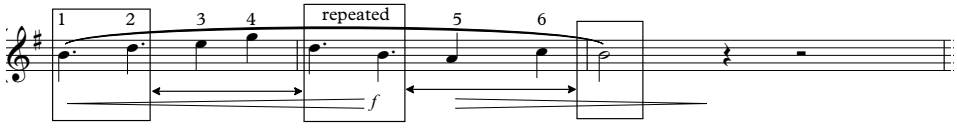
Limited intervals

Between bars fifteen and twenty I experimented with limited intervals to form motifs. At bar eighteen the two-note limited intervals begin to develop into phrases that lead to a series of chords, formed with the hexachord technique, as taught to me by Dr. Norman Ludwin.[100]

Theme

Seeking harmonic relationship between Movement II and Movement III led me to select the antecedent six-note melody phrase from Movement III and re-purpose it as a hexascale, creating a "note pool" that would provide tonal commonality between movements II and III. (See figure 3.9)

Figure 3.9: *Play*—Antecedent melody creates the note pool – measure A-26



This hexascale is the starting point for hexachords, a technique that is often used by film, TV and concert composers because it quickly results in a modern non-tonal sound.[101]

[100] Ludwin, Norman, Composition, *A New Approach,* http://www.musicnewapproach.com/composition---a-new-approach

The composer can be quite flexible when applying the technique in order to find a suitable mixture of atonality vs. tonality and "orchestration fit." When stacking the hexascale, a simple six-note chord takes shape. (See figure 3.10)

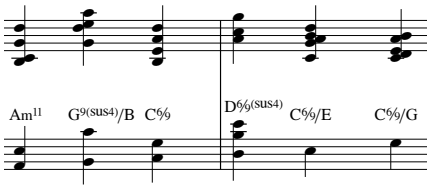
Figure 3.10: *Play*—The six-note hexascale forms a hexachord

(A, B, C, D, E, G)

Hexachord technique involves starting with each note of a selected hexascale and placing the remaining scale tones on top to form a hexachord. Any six-notes can form a hexascale. There are 46,656 possible scale combinations.[102]

For clarity the lower notes are stacked at a distance of at least a fifth, but as the register rises the notes can be closer together. Keeping the notes in the staff is preferable. This consideration of range and interval spacing is good practice because it follows the principles of physics found in the harmonic overtone series.[103] I stacked the hexascale notes randomly on top of each root to hear the resulting vertical commonality in sequence.[104] (See figure 3.10)

Figure 3.11: *Play*—Hexachords built from the hexascale in sequence

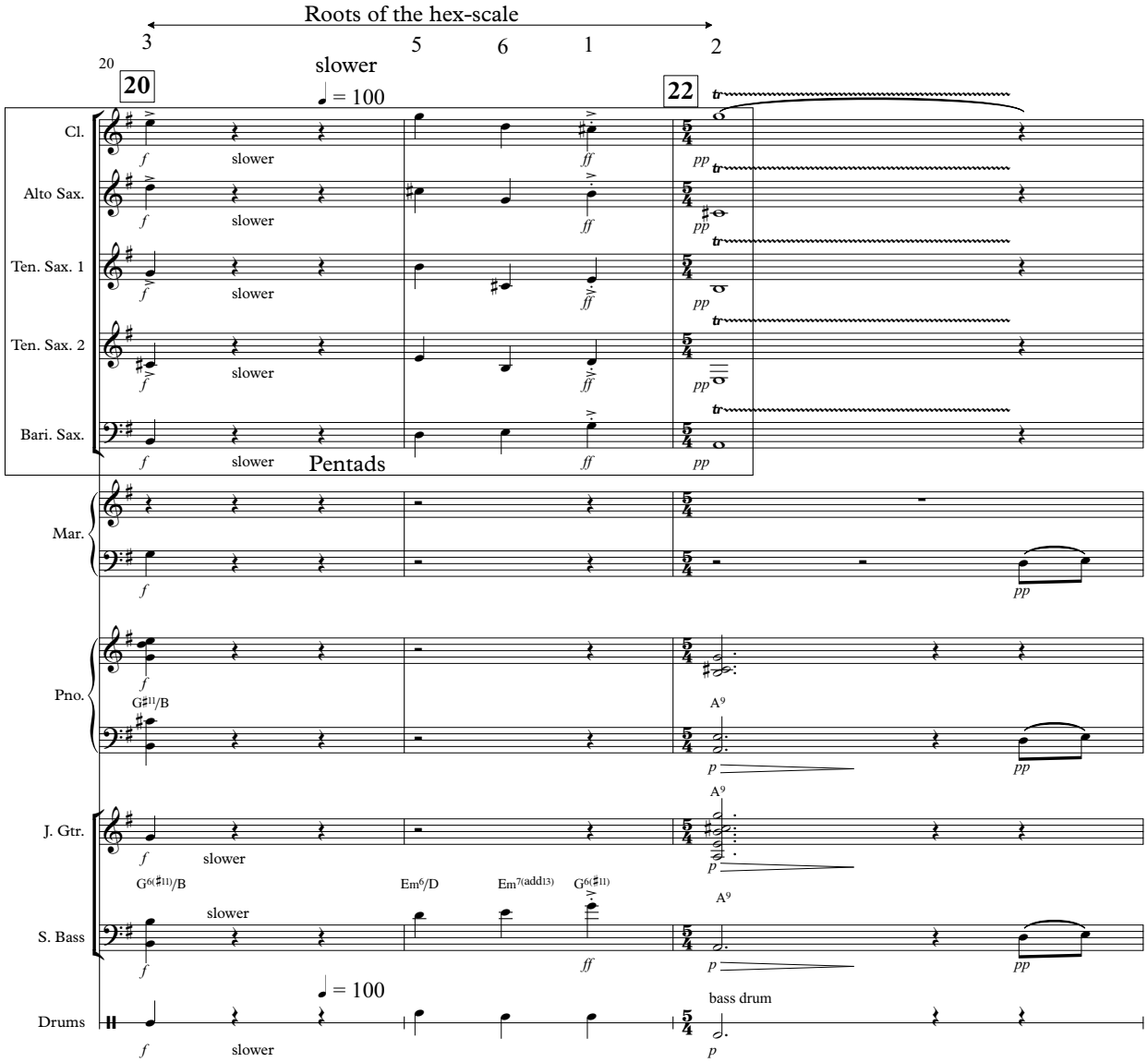


Once I heard these chords, I felt they had too much commonality because the hexascale is very diatonic. Hexachord technique can bring a high degree of contrast and at this location in the composition I felt the need for more of that. To compensate for the diatonic hexascale, I diverged

[101] Ibid, Ludwin
[102] Ludwin, Norman, What are Hexachords?
[103] Delamont, Gordon, *Modern Harmonic Technique,* Chapter 1 & 2, Kendor Music Inc.
[104] Modal stacking; random vertical placement of the remaining five notes found in the hexascale.

from the technique by augmenting some notes, seeking more harmonic function that would increase the diversity of the sequence. I raised C to C# and even removed one note per chord to reconfigure them as pentads (five-note chords), which made spreading the voices across the five-part sax section much easier. The final adjustment involved removal of the chord built on the fourth degree. Without the fourth degree the sequence of roots became a G major pentatonic scale. I voiced these notes across the saxophone section and it resulted in vertical sounds that I would not have conceived of otherwise. (See figure 3.9)

Figure 3.12: *Play*—Hexachords adjusted to fit the composition



Hexachord technique suggests a method for calculating commonality vs. difference when modulating hexachords. Modulating the hexascale by seven ½ steps in either direction would find the last modulation with the root a diminished fifth away from the original start note. Then counting, tabulating and comparing common tones to the original hexascale will indicate what modulation could be used to seek more commonality or difference.

A higher count of common tones contained in a modulated hexascale would lead to commonalty, but fewer common tones would bring diversity. I wondered if counting common intervals within the hexascale might also predict gradation between common and diverse tonality. In the hexascale there are three whole-tone intervals contained within the six notes. This might suggest that an upward modulation of a whole tone could create a sound that is quite common to the home key, because out of the six notes, fifty percent of the intervals are the same. Consequently if a tri-tone modulation were selected, there may be a noticeable contrast because there are no tri-tone intervals found in the hexascale. At section A-5-83 I tried a series of modulations to play with this idea. The modulation at bar eighty-five did provide a highly contrasting sound.
(See table 3.14)

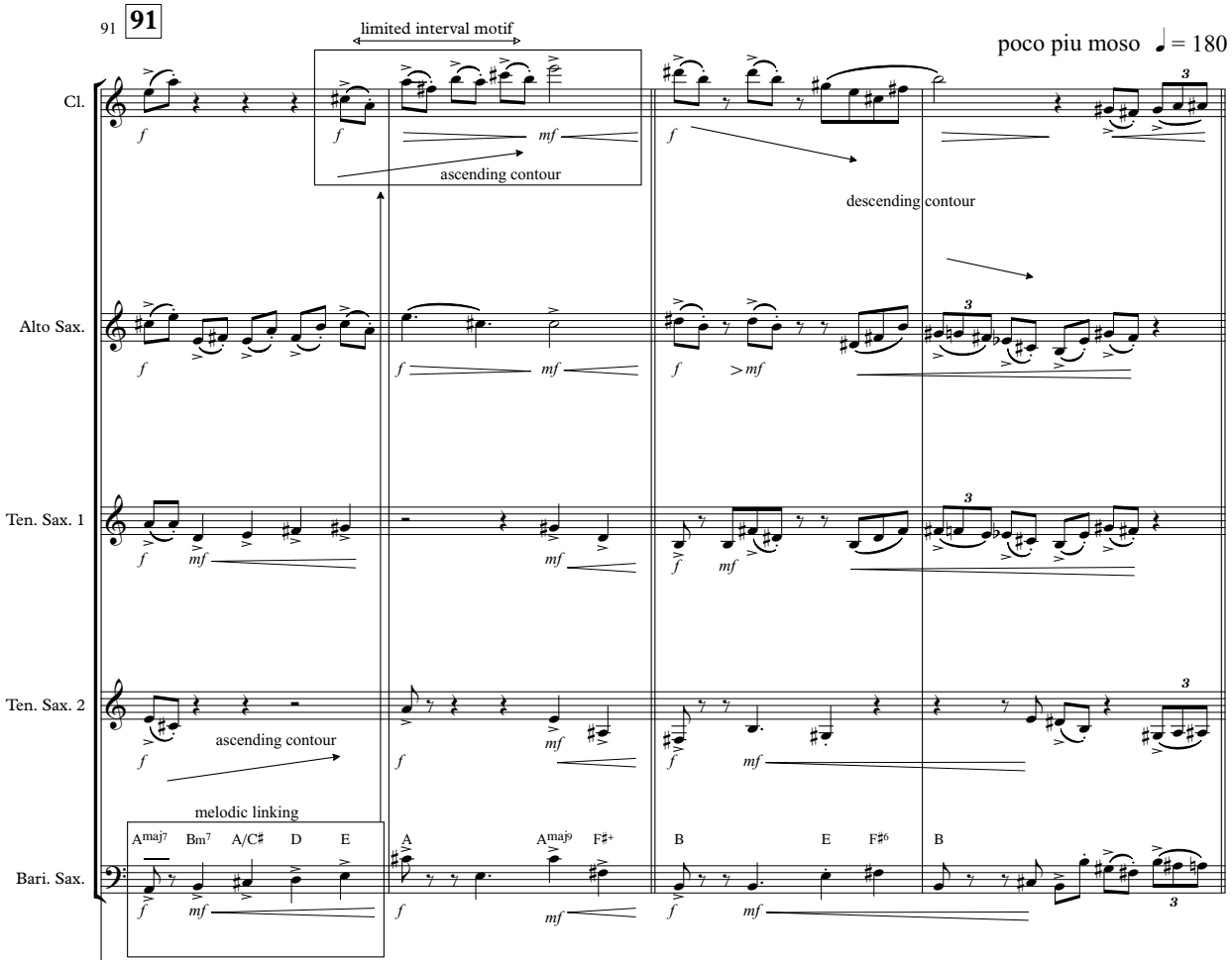
Table 3.14: *Play*—Hexascale interval count and modulation locations

Interval	min 2nd	WT	M3rd	Maj 3rd	4th	Tri-tone	5th
Interval count	1	3	3	2	3	0	3
Location of modulation	Bar 85	Bar 91	Bar 89	Bar 93	Bar 87	none	Bar 83

I remain unsure about this experiment of counting intervals as a way to measure contrasting modulations, but possibly more dissonant hexascales would bring clearer results. This hexascale is very diatonic, and that inherent consonance did not naturally provide much diversity, however it did create a series of modulations that were pleasing. In the spirit of "play" I accepted them, but also realized they sounded like a technical exercise. My next job became smoothing out bar eighty-three to bar ninety-five. To accomplish this task I combined the techniques of melodic

linking with theme and variation. An example of melodic linking is found at bar ninety-one with an ascending bass line that melodically links to a variation played by the clarinet at bar ninety-two. This effect of starting with a low antecedent phrase and linking it to a high consequent one is a way to bring sections together. Inverting that contour across bars ninety-three and ninety-four leads the listener to the next section, which brings an abrupt change from a very densely orchestrated polyphony to unison, while the bass part ascends. The end of the modulation sequence returns to the home key with a restatement of the theme. (See figure 3.13)

Figure 3.13: *Play*—Example of melodic linking, antecedent and consequent contour



Conducted meter

Play is the only composition in the suite that uses conducted meter and the significance of that is to symbolize freedom as a foundation for uninhibited play to occur. It also presents a strong contrast to the persistent "rhythmic motor" of Movement I. The way I annotated the tempo changes on the score provides the conductor with tempo points to reach at specific bar numbers. I envision that the conductor would learn the piece in whatever way he or she feels comfortable, but as a composer and in the spirit of play, I would welcome some interpretation and variation from my markings.

CHAPTER FOUR

HUMANASONICS

(Movement III)

RIVERBED

The melody of *Riverbed* will be familiar as it formed the hexasacle used in Movement II, *Play*, but East Africa, specifically Ethiopia and Eritrea, provides the rhythm. *Riverbed* is in the time signature of 5/4, which is specific to the Tigray tribe. 4/4 and 12/8 are common meters for Ethiopian jazz and the '60s genres; Latin "cha-cha" and "American Boogaloo" provide the predominant rhythmic influence for Ethio-jazz.[105] Chickchika, names the 12/8-meter and some 7/4-meter also exists, but *Riverbed* is similar to the "Tigray beat." (See figures 4.14 and 4.15)

Figure 4.14: *Riverbed*—The African "Tigray beat" in 5/4 (variations exist)

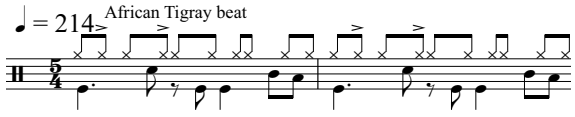
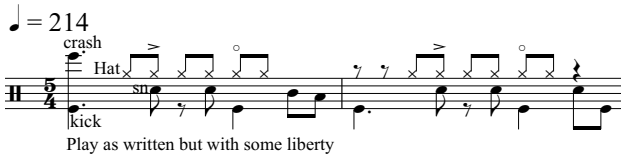
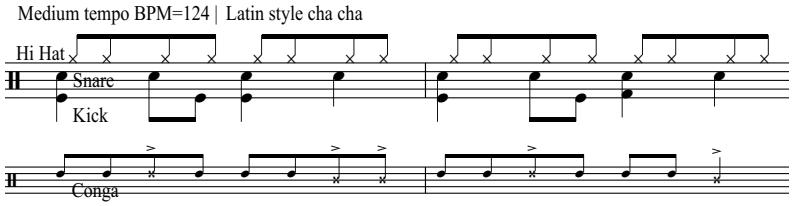


Figure 4.15: *Riverbed*—The *Riverbed* variation in 5/4



Common Ethiopian jazz drum patterns are illustrated. (See figures 4.16, 4.17 and 4.18)[106]

Figure 4.16: 4/4—Latin style cha cha



[105] It is common to refer to Ethiopian jazz as Ethio-jazz

[106] Ethio-Jazz drummer, Daniel Barnes—Aster Aweke, provided these Ethiopian drum patterns.

Figure 4.17: 4/4—Boogaloo—Funk, American popular style from the '60s (1/2 X feel)

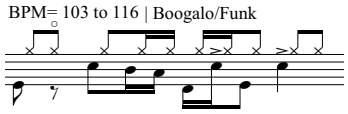
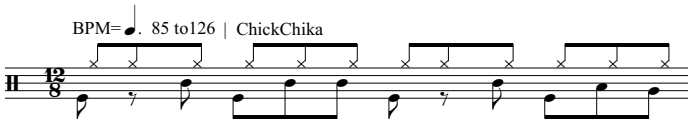
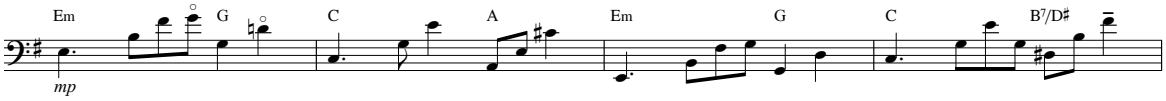


Figure 4.18: 12/8—Chikchika—the most common Ethiopian jazz drum pattern



The bass line of *Riverbed* has many large interval leaps that make it challenging to play but once learned, it plays comfortably because it uses harmonics, open strings and string crossing to assist with the big physical distances and leaps that must be traversed. This bass line is rhythmically complimentary to the Tigray beat. (See figure 4.19)

Figure 4.19: Riverbed—The Riverbed bass line



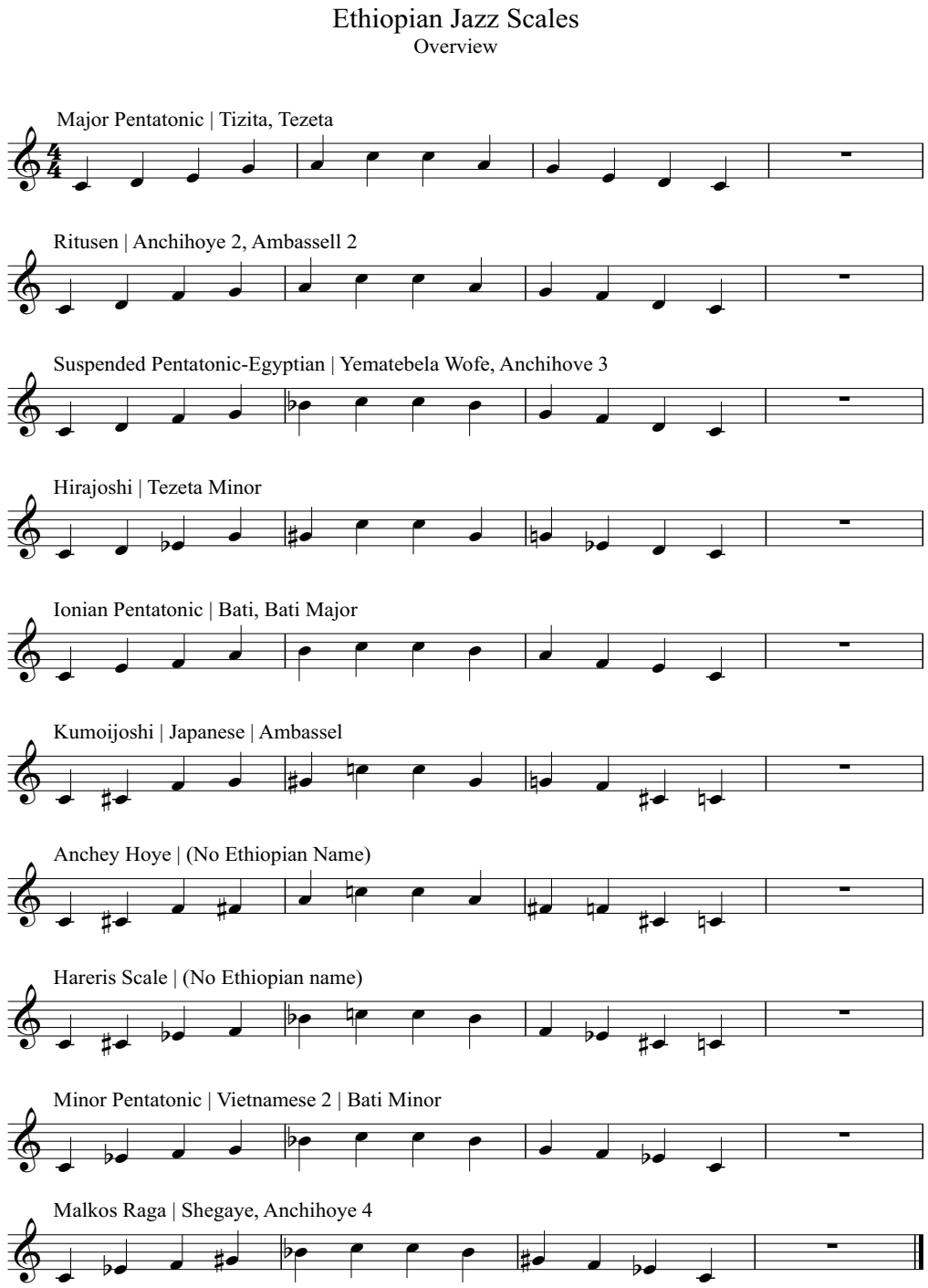
Ethiopian jazz scales

Riverbed has a folksy melody that comes from a pool of six notes, however Ethio-jazz tradition uses five-note pentatonic scales and there are many that define its unique cultural sound.[107] Generally, Ethio-jazz improvisers do not depart from the chosen pentatonic scale during their solos and this predominant or "nearly invariable trait" uniquely defines Ethiopian jazz. However, in *Riverbed*, I prefer that improvisers would depart from the scale to attain a more diverse sound, conversely I assigned a related invariable trait to the piano and guitar accompaniment.[108] The solo section at bar ninety-one specifies a repeating chant played by the piano and guitar. (See figure 4.20 for an overview of ten common Ethiopian jazz scales)

[107] Johnson, Timothy, *Music theory, Ethiopian music*, http://fsuworldmusiconline.wikidot.com/music-theory-ethiopian-music

[108] The accompaniment repeats an invariable background chant as a harmonic counterpoint for the soloist.

Figure 4.20: *Riverbed*—Ten common Ethiopian jazz scales



CHAPTER FIVE

HUMANASONICS

(Movement IV)

KINSHIP

In this movement the universal of "Kinship" was inspirational in a much different way than the universals that inspired previous movements. *Kinship* presented the opportunity for compositional role-play to be used as a principle of organization. I arrived at this idea by considering the leitmotif, a term that describes a recurring musical theme or phrase that is linked to a character, place or idea and used in plays, operas and movies. Wagner used leitmotifs in his operas to present a recognizable musical theme that associated a character.[109] It is worth noting that a "mnemonic motif" is a cousin of leitmotif. Similarly, it is used to create an association with the attachment of a memorable music melody or sound. There are many examples of strong mnemonic motifs in advertising, and media composers understand exactly how to compose these lasting musical associations by creating what are commonly known as "hooks" and "earworms."[110] My idea was to use "kinship terms" as a character guide for the melody, bass, harmony and orchestration. I speculated that by attaching kinship terminology to notes, some coherent motifs and compositional traits would evolve.

Mother and father figures were assigned to the melody and bass parts, however I considered them to be genderless, respecting the idea that each part could equally share responsibility for linear development. The melody and bass symbolized parental outer guides, and I viewed the inner harmony that was yet to come as their future siblings. Starting with just the melody and bass, I through-composed the entire composition using just the two parental parts. As I worked I began to visualize them as rhythmic dancing partners; one would rest while the other took the lead; their steps could align or be contrary, forming a range of contrasting contours that also involved melodic consonance and dissonance. I observed the melody and bass visually, imagining them to represent the sky and earth with a horizon in the middle. This perspective of contour helped me to gauge the intervallic width between notes over time and also informed my sense of how the contour of the composition could be shaped to arrive at the ending.

---

[109] Wagner, Richard, *Der Ring des Nibelungen* contains over 60 leitmotifs, http://www.umich.edu/~umfandsf/symbolismproject/symbolism.html/Teutonic_Mythology/wagleit.html

[110] Intel "Bong," http://www.intelfreepress.com/news/intel-bong-chime-jingle-sound-mark-history/8390/

I observed the composition as a grand series of antecedent contour ascensions that predominantly occurred over shorter time periods than their consequent descents.

Compositional decisions such as unapparent key signature, modulation and unpredictable fluctuation between major and minor tonality intend to symbolize a family member who is non-committal, veiled, unpredictable and does not readily share what is in their heart and mind, causing others to speculate about what they are thinking. Specifically between bars G-229 and H-251, these character traits gradually transition from an unassertive calm sound to angry.
After this section of outrage, a long cadence of calming sound unfolds that is meant to express empathy and understanding. The solo flute and clarinet's melodies provide a dialogue that I hope will be perceived as consoling. Emotional dynamics are a big part of all family relations and with the hope of "near" universal understanding, these compositional decisions—similarly to leitmotifs—attempt to symbolize and transport some of the emotional family traits that people experience. As Thomas Fritz asserts in his study *The Dock-in Model of Music Culture and Cross-Cultural Perception,* conveyance of the basic emotions of happiness, sadness and fearfulness can likely be universally perceived from music.[111] I speculate that anger and possibly even humour could be added to that list. The theory of emotions traveling through music in a universal way may lead to further reference of *The Doctrine of Affections*. Originally employed by German baroque period musicologists Herman Kretzschmar and Arnold Schering, the doctrine was an aesthetic theory relating to musical expression, derived from Greek and Latin origins.[112]

The craft

When I wrote the initial two-note through-composition on grand staff, there was no key signature or harmonic voicing to guide enharmonic decisions, so I concentrated on notes sounding pleasing and let the accidentals fall as they may. In the final score, I adjusted enharmonic spelling to help musicians see a consistent schema to assist with sight-reading.

When the inner harmonic voices are added to the sequence of parallel Major7th chords, they provide a heightened euphoric feeling in comparison to the less euphoric two-note outline. When adjusted to minor by moving the bass note up a semitone, while keeping the same melody

[111] Fritz, Thomas, *The Dock-in Model of Music Culture and Cross-Cultural Perception*, Music Perception: An Interdisciplinary Journal, Volume #30, No 5, June-2013, pg. 512.
[112] http://www.oxfordmusiconline.com.ezproxy.library.yorku.ca/subscriber/article/grove/music/00253

note, the emotional mood changes to sad. Amongst listeners, this emotional change is predominantly perceived, however some people simply do not hear the emotional difference between major and minor. (See figures 5.21, 5.22 and 5.23 antecedent and consequent phrases).

Figure 5.21: *Kinship*—Antecedent phrase with chords (highly euphoric)

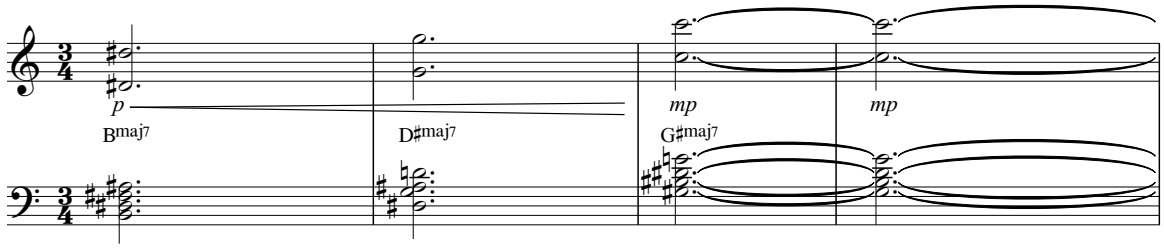


Figure 5.22: *Kinship*—Antecedent phrase with 2 notes (less euphoric)

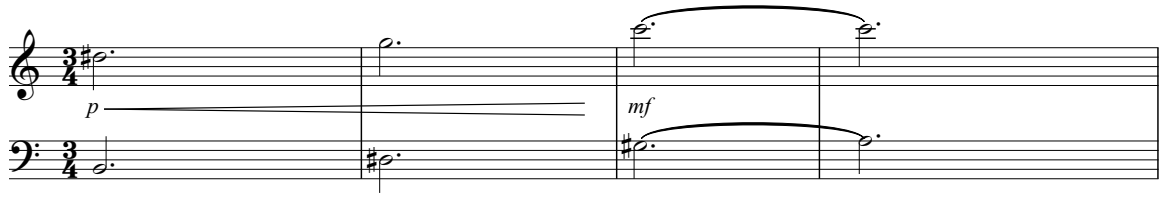
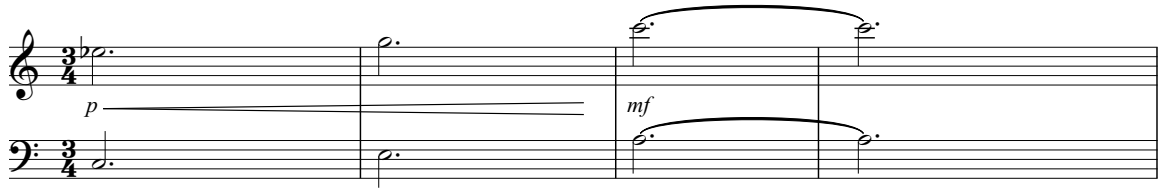


Figure 5.23: *Kinship*—Consequent phrase suggests C minor; 2 notes–same melody (sad)



The form and dynamics

Decisions about form were challenging because forward motion—tension—and its consequent release had to be realized with just two notes to create the contrapuntal interplay. The result was that melodic linear development became the primary device for creating anticipation of upcoming events. There were times when the bass line would advance (bar fourteen—fifteen) and times when the melody would lead, (bar thirty-one—thirty-two) and other times when they would be locked in rhythmic synchronization, as found in bar forty-eight.

Major and minor tonality fluctuated by changing the bass note, as is illustrated by the primary antecedent phrase that suggests a major tonality starting on the note B, and the consequent phrase suggesting a different tonality that starts on the note C. Through-composition with just two notes should indicate dynamics as they provide an essential "parental" role that will determine future orchestration weight and inner harmonic density.

In figures 5.21 and 5.23 both parental notes move together with an intervallic range of approximately 2.3 octaves forming an outer border with enough room in the middle for the future inner harmony to be placed. When considering instrument dynamics and range in *Kinship*, I knew that both the woodwind and brass families, by their characteristic nature, increase in volume when crossing from their lower range to their tessitura or power range. It is with this understanding that the specific dynamic markings of *p* to *mf* call for more emphasis.

Orchestration

Kinship terminology also inspired me to consider the sound colours available from the many combinations of the woodwinds and brass. The saxophone section would have its doubles and the brass section would have its pool of mutes. Combining these options must further consider the characteristic dynamic nature of these instrument families. For example, a flute playing at the same time as the open brass instruments would be imbalanced, so I sought to balance the two instrument families while creating some complex timbres derived from pools of instruments. (See table 5.15, Woodwind and Brass family, doubles and mutes.)

Table 5.15: *Kinship*—Woodwind and Brass family, doubles and mutes

Woodwind family	**Doubles**
Alto sax 1 & 2	Flute, clarinet
Tenor sax 1 & 2	Clarinet, soprano sax
Baritone saxophone	Alto flute and bass clarinet
Brass Family	**Doubles & Mutes**
Trumpets	Flugelhorn, open, straight mute, cup mute, bucket mute and harmon mute
Trombones	Open, open, straight mute, cup mute, bucket mute and harmon mute, bass trombone

Kinship uses many different combinations of muted brass and woodwinds, but some of the most euphonious combinations were Harmon mute trombone/clarinet and flugelhorn/Harmon mute trumpet and trombone. I selected the flugelhorn as a melody instrument because it has a warm and round tone that is complimentary to the woodwinds and muted brass. I was seeking a sound that is similar to what bandleader Maria Schneider often achieves.[113] I view her tone as blended and cohesive, a warm "grey" ensemble colour, which can be achieved by doubling groups of instruments to form small "pooled ensembles" within the larger ensemble. Her use of flute, accordion and voice create hybrid timbres that support her scripted style of composition. When several players perform the same part there is less room for individual interpretation, but alternatively, this orchestration achieves a "thick and warm" group sound that I adore.

The jazz guitar provides cohesion in the tenor range when paired with woodwinds and muted brass, providing fundamental low frequency to trombones with Harmon mutes, and generally complimenting either family or individual instrument with its pointed and percussive string voice.

At bar forty-seven, an ascending pattern occurs in the bass, which refers to Wayne Shorter's composition *Footprints*.[114] The motif intends to symbolize a universal trait of siblings

[113] Schneider, Maria, *Three Romances, Part 1,* https://itunes.apple.com/ca/album/concert-in-the-garden-concert-in-the-garden/id643983993
[114] Footprints: Wayne Shorter, *Adams Apple,* Herbie Hancock, Reggie Workman and Joe Chambers, Bluenote,1967

following in their parent's footsteps through a combination of nature and nurture. This bass melody moves the music and story forward while providing a familiar, recurring statement.

As previously mentioned the musical emotion turns to angry at H-234 and to support that emotion with the orchestration, all the brass mutes are removed and the woodwinds change to saxophones. At location I-259 a unique break away from ensemble orchestration happens for four bars. This is a section where the flugelhorn improvisation heeds to the consoling flute and clarinet melodies.

In the course of writing *Kinship* I was surprised by how many ways I was able to reflect "kinship" terminology in order to organize melody, rhythm and orchestration for the purpose of metaphoric symbolization. I believe that a composer could start with the same inspiration on many different days and still find many new ways to utilize the universal of "kinship" in the creation of music.

Kinship theory and universals

I have now realized that the study of universals and kinship suffer from an unfortunate lack of interest by many anthropologists. There is a lot of skepticism that surrounds the traditional study of kinship, just as there is skepticism in the study of universals.

Traditionally, anthropology was charged with kinship study (as well as universals) but since the '70s there has been significantly less interest in kinship.[115] Cognitive anthropologist Paulo Sousa describes why there is a decline of kinship study while also mentioning his view on "commonality" in the human species by saying:

> *"A common explanatory picture in anthropology is that the decline of kinship as an object of study is just a result of the progress of knowledge of the discipline, which converged to the conclusion that Homo sapiens is a special species whose behavior and thought cannot be understood in causal terms and whose only specific and substantial commonality is the symbolic capacity to realize different cultures."*

Providing I am interpreting Paulo Sousa correctly, his comment indicates that even a cognitive anthropologist is capable of reducing the topic of human universals to insignificance.

[115] Sousa, Paulo, *The Fall of Kinship, Towards an Epidemiological Explanation*, Journal of Cognition and Culture, 3.4, Koninklijke Brill NV, Leiden, – 2003

CHAPTER SIX
CONCLUSION

I believe that the study of universals presents a foundational, cross-cultural, and general theory of mankind's traits and conditions.

Music psychologist S. Brown and ethnomusicologist J. Jordania suggest that identifying a foundational, cross-cultural, "general theory" of music is a necessity "if we are to understand what music is, how it evolved and how it is represented in the mind and the brain."[116] By extension, such a "general theory" may also exist in anthropology, biology, theology, aesthetics and any other discipline that discusses universals. I now view universals as "coherences" that cut through the manmade constructs and organization of cultural, religious and political difference.

German philosopher Immanual Kant was an early exponent of the idea that universal peace (political, social and legal) could be secured by universal democracy and international cooperation.[117] Further concerning the way people have organized themselves, digital communications technology has now advanced mankind's ability to experience many more aspects of commonality and difference then has ever been possible in any previous civilization.

In the 1960s, visionary philosopher Marshall McLuhan propounded that the "global village" has shifted mankind's existence from an individual experience to a tribal experience.[118] The concept of "global village" means that humanity is uniting in singular views, thoughts and experiences, regardless of geographic location. A tribal experience refers to group thinking, rather than individual thinking, which perhaps has now fueled sectarianism to its current levels.

The idea that humanity has a global common experience through communication technology is an example of how people in the "global village" experience "oneness" everyday. As I see it, this relatively new human experience requires each world citizen to adapt to their reality, making it all the more necessary to better understand human universals and thereby attain a more balanced perspective of mankind's commonalities and differences.

With regard to music education I believe the procedures utilized in *Humanasonics* may even inspire a unique system of research study and its application to music composition, offering

---

[116] Brown,S. Jordainia,J. Universals in The Worlds Music., SEMPRE, pg. 230, – 2011.
[117] Kant, Immanuel, *Key Concepts*, Durham, UK : Acumen – 2011
http://ebookcentral.proquest.com.ezproxy.library.yorku.ca/lib/york/reader.action?doc ID=1886946#pg. 106-109
[118] MacLuhan, Marshall, The World is a Global Village CBC TV, https://www.youtube.com/watch?v=HeDnPP6ntic

new methods and principles of compositional organization that focus specifically on reflecting and relating music to humanity. In my academic future, this interest may become a dissertation.

As a music composer and bassist, human universals have provided an inspiring lens through which to view humanity, consider human nature, and reflect upon the essential core values, traits and conditions that make us human, allowing me to metaphorically express them sonically. Human universals have allowed me to explore a fundamental level of coherence that exists between humanity and music, which I believe is capable of providing boundless and exciting artistic potential for the future.

My hope is that, on hearing and then exploring the context of *Humanasonics*, the listener will intuitively understand the basic human universals that inspired it, an inevitable consequence of hearing music metaphorically based on one or more immutable human universals, leading to an inherent understanding—unconscious or conscious—of the work.

Bibliography

Brown, Donald E., (Department of Anthropology, University of California–Santa Barbara, Professor Emeritus) *Human Universals*, McGraw Hill, Inc. – 1991.

Byrne, David, *How Music Works*, Mc Sweeney's San Fransisco – 2012.

Colgrass, Michael, Neal Colgrass, and Ulla Colgrass. *Adventures of an American Composer: An Autobiography / Michael Colgrass ; Edited by Neal and Ulla Colgrass*. 1st ed. Galesville, MD: Meredith Music, – 2010.

Delamont, Gordon, Modern Harmonic Technique, Kendor Music Inc. Delvan New York – 1965.

Dumont and Parkin, *"An Introduction to Two Theories of Social Anthropology,"* New York: Berghahn Books – 2006.

Dutton, Denis. *The Art Instinct: Beauty, Pleasure, & Human Evolution*. Bloomsbury Press paperback edition, New York: Bloomsbury Press, – 2010.

Francis, Dale. *The Quelbe Commentary 1672-2012: Anthropology in Virgin Islands Music*. iUniverse, – 2014.

Grove, George, Oxford on-line, New Music Dictionary.

Huron, David, *Sweet Anticipation*, The MIT Press, Cambridge, Massachusetts, London, England, – 2006.

Ladd, Robert, *Intonational Phonology*, Cambridge, UK, New York, Cambridge U. Press – 2008.

Levitin, Daniele J., *This is Your Brain on Music,* The Science of a Human Obsession, Plume, Penguin – 2006.

Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill. Northwestern University Press, – 1964.

Nettl, Bruno, and Philip V. Bohlman. *Comparative Musicology and Anthropology of Music: Essays on the History of Ethnomusicology*. University of Chicago Press, – 1991.

Ondaatje, Michael, and Walter Murch. *The Conversations: Walter Murch and the Art of Editing Film*. Vintage Canada ed. Toronto: Vintage Canada, – 2002.

Passmore, John, *Man's Responsibility For Nature*, Duckworth, London – 1974.

Pinker, Steven, *The Blank Slate, The Modern Denial of Human Nature,* Viking, Penguin – 2002.

Platt, John, R. *"New views of the nature of man,"* The impact of the concept of culture on the concept of Man, *Clifford Geertz,* pg. 93-118, Chicago: U of C Press. – 1965

Rifkin, Jeremy, *The Third Industrial Revolution,* Palgrave Macmillan – 2011.

Rifkin, Jeremy, *The Empathetic, Civilization*, Penguin – 2009.

Rifkin, Jeremy, *The Zero Marginal Cost Society,* MacMillan – 2014.

Shelamy, Kay Kaufman, *"Ethnomusicology, History, Definitions, and Scope,"* Garland Publishing, Inc. – 1992.

Sheridan, Mary, *"Play in Early Childhood."* 3rd edition, Routledge, – 1977-2011.

Slonimsky, Nicolas, *Thesaurus of Scales and Melodic Patterns*, MacMillan Publishing Company, 866 3rd Ave., New York, N.Y.10022 – 1986.

Sousa, Paulo, *The Fall of Kinship, Towards an Epidemiological Explanation*, Journal of Cognition and Culture, 3.4, Koninklijke Brill NV, Leiden – 2003.

Strathern, Marilyn, *"Reproducing the Future,"* Essays on Anthropology, *Kinship and the New Reproductive Technologies*, New York, NY, Routledge, – 1992.

Sullivan, Jack, *Hitcocks Music*, Yale University Press, New Haven and London – 2006.

Wade, Bonnie, *"Thinking Musically,"* Oxford University Press – 2013.

Journal Articles / Ebooks

Alvarez-Pereyre, Frank &Arom, Simha, *Ethnomusicology and the Emic/Etic Issue*, The World of Music, Vol 35, Jstor – 1993

Brown, Donald E., *Human Universals, Human Nature & Human Culture.* Daedalus 133, no.4- 47-54 – 2004.

Brown, Stephen and Joseph Jordainia, *Universals in the world's musics.* SEMPRE, society for Education, Music and Psychology research. Psychology of Music, 41 (2) 229-248, pom.sagepub.com – 2011.

Dutton, Denis, Aesthetic Universals, The Routledge Companion to Aesthetics – 2002.

Feyerbend, Paul,K., *Problems of Empiricism*, Philosophical Papers, Vol. 2, (*Politics* 1329b25), Cambridge University Press – 1981.

Fritz, Thomas, "*The Dock-in Model of Music Culture and Cross- cultural Perception,"* Music Perception, Vol 30, No. 5, University of California Press – 2013.

Ludwin, Norman, *Composition, A New Approach,* Ludwin Music – 2014.

Matsunobu, Koji, *"Spirituality as a Universal Experience in Music,"* The Journal of research in music education, Vol. 59, No 3, SAGE Publications, October, – 2011.

Nettl, Bruno, *"On the Question of Universals,"* The World of Music, Vol.19 No. ½ – 1977.

Kant, Immanuel, *Key Concepts*, http://ebookcentral.proquest.com.ezproxy.library.yorku.ca/lib/york

Roughley, Neil, *Being Humans, Anthropological Universality and Particularity in Transdisciplinary Perspectives,* Afterward, *Human Nature, A Conceptual Matrix,* Berlin: Walter de Gruyter. – 2000.

Sinding Jensen, Jeppe; *"Universals-General Terms, The Comparative Study of Religion"* Numen, Vol.48, No.3 Brill – 2001.

Weissmann, Hans Asriel, "On the Concept of Universals." Philosophy and Phenomenological Research*,* Vol.27, Dec. – 1966.

Web Sites

Afrvicville Museum, Accessed January 1st – 2017. http://africvillemuseum.org/

Anthrosource, American Anthropological Association: Accessed March 1st – 2017. http://anthrosource.onlinelibrary.wiley.com/hub/results/?search=Donald+Brown%2C+Universals&journal-doi=10.1111%2F%28ISSN%291548-1433

Brown, Donald E., Human universals, Human nature & Human culture: Accessed January 1, – 2017. http://www.jstor.org.ezproxy.library.yorku.ca/stable/20027944

Coltrane, Mingus & Simone, Accessed March 1, – 2017. *How Jazz and The Civil Rights Movement came together in the 1960's,* http://blankonblank.org/2015/05/jazz-civil-rights-movement/

Cummins, Fred, Accessed March 1st, – 2017. http://pworldrworld.com/fred/?page_id=14

DC-3, Boeing, Accessed February, 15th, – 2017 http://www.boeing.com/history/products/dc-3.page

Dutton, Dennis, Accessed March 5th, – 2017. http://www.denisdutton.com/essays.htm

Hawkins, Sarah, Accessed March 1st, – 2017.
http://www.mus.cam.ac.uk/directory/sarah-hawkins

How Jazz and The Civil Rights Movement came together in the 1960's,
Coltrane, Mingus & Simone, Accessed March 1st, –2017.
http://blankonblank.org/2015/05/jazz-civil-rights-movement/

Intel "Bong," Accessed March 1st, – 2017.
http://www.intelfreepress.com/news/intel-bong-chime-jingle-sound-mark-history/8390/

International Council for Traditional Music: Study Group on Anthropology of Music in Mediterranean Cultures. "Music & Anthropology." Study Group on "Anthropology of Music in Mediterranean Cultures" of the International Council for Traditional Music, 1996. http://www.muspe.unibo.it/period/ma/index.htm.

International Phonetic Association, IPA Table: Accessed February10th,– 2017.
http://www.internationalphoneticassociation.org/content/ipa-chart,

Johnson, Timothy, *Music theory, Ethiopian music*, Accessed February10th, – 2017.
http://fsuworldmusiconline.wikidot.com/music-theory-ethiopian-music

Ludwin, Norman, Ludwin Music, *What are Hexachords,* Accessed March 1st, – 2017.
http://www.musicnewapproach.com/

Sweet, Henry, *The Henry Sweet Society,* Accessed March 1st, – 2017.
http://www.henrysweet.org/

The most creative year in Jazz was 1959. Various-artists-by-Nathan-Holaway
Accessed Feb 25th, – 2017
https://www.allaboutjazz.com/1959-the-most-creative-year-in-jazz-various-artists-by-nathan-holaway.php

UNESCO,"International Decade for Action *"Water for Life"* 2005-2015. Focus Areas."
Accessed January 15th, – 2017
http://www.un.org/waterforlifedecade/water_and_sustainable_development.shtml

UNESCO, The Universal Declaration on Cultural Diversity, 2002, Accessed April 15th,– 2016
http://unesdoc.unesco.org/images/0012/001271/127162e.pdf

United Nations High Commission for Refugees, (NHCR) Accessed February 25th, – 2017
http://legal.un.org/avl/ha/prsr/prsr.html

Wagner, Richard, *Der Ring des Nibelungen,* Accessed February 25th, – 2017.
http://www.umich.edu/~umfandsf/symbolismproject/symbolism.html/Teutonic_Mythology/wagleit.html

Discography

Astatke, Malatu, *Sketches of Ethiopia*, Jazz Village, JV570015, – 2012-2013

Astatke, Malatu, *Plays Ethio-Jazz,* PolJazz (POL) PSJ252, – 1985

Bowie, David, *Blackstar,* Columbia Records, 88875173862, [iTunes] – 2016

Caymmi, Dori, *Contemporaneous,* [iTunes] – 2003

Cooder, Ry & V.M Bhatt, *A Meeting by the River,* [iTunes] – 1993

Gibbs, Terry, *Dreamband,* Volume 6 [iTunes] – 2002

Guinga, *Cine Baronesa*, [iTunes] – 2006

Jones, Quincy, and American Song - York University. *Walking in Space*. American Song. Hollywood, CA: A & M Records, – 1970.

Lobo, Edu, *and the Metropole Orkest* [iTunes] – 2013

Luc, Sylvain, *Trio Sud,* 2002 [iTunes] – 2002

Mingus, Charles, *Ah Um*, Columbia Records, Col CL1370, – 1959

Nimmons, Phil,
Canadian Portraits, Dave McMurdo Jazz Orchestra, [CD] – 2004

Pina Soundtrack, – 2005
Wim Wenders Film, various artists [iTunes] – 2011

Ravel, Maurice, Alice Ader, et al. *Complete piano works*. 1 vols. Brussels]: Fuga Libera, – 2012.

Schneider, Maria, *Concert in the Garden,* Artist Share AS0001 [CD] – 2007

Schubert, Franz, *Songs on the Theme of Water,*
Peter Kooij & Leo Van Doeselaar, [iTunes] – 2000

Sealy, Joe, *Africville Suite,* 1996 Juno Award Winner.
Triplet Records Inc. SJ-1005-2, [CD] – 1996

Shorter, Wayne, *Adams Apple,* Blue Note, BLP4232, Feb 24th – 1966 [LP]

Williams, John, *Star Wars: The Music of John Williams and Other Great Composers*. 1 vols. Naxos International. Germany: Naxos International, – 1989.

Zawinul, Joseph*, Zawinul Syndicate-The Immigrants,* [iTunes] –1988

Filmography

MacLuhan, Marshall, The World is a Global Village CBC TV, Accessed, March 16 – 2017 https://www.youtube.com/watch?v=HeDnPP6ntic

Simone, Nina, *What Happened Miss Simone?* Accessed October 21, – 2016 www.netflix/watch/70308063,

APPENDIX A: INSTRUMENTATION OVERVIEW AND SCORES
HUMANASONICS

Movement I

TRANSCONTINENTAL SOUL

Alto saxophone 1&2,
Tenor Saxophone 1&2
Baritone Saxophone
Trumpets 1-5 (mutes required)
Trombones 1-3
Bass Trombone
Piano
Vibraphone
Guitar
String Bass, with a low C extension
Drums and African percussion

Movement II

PLAY

Clarinet
Alto Saxophone
Tenor Saxophone 1&2
Baritone Saxophone
Trumpets 1-5
Trombones 1-4
Bass Trombone
Piano
Guitar
String Bass, with a low C extension
Drums (soft mallets required)

INSTRUMENTATION OVERVIEW
(Continued)

Movement III

RIVERBED

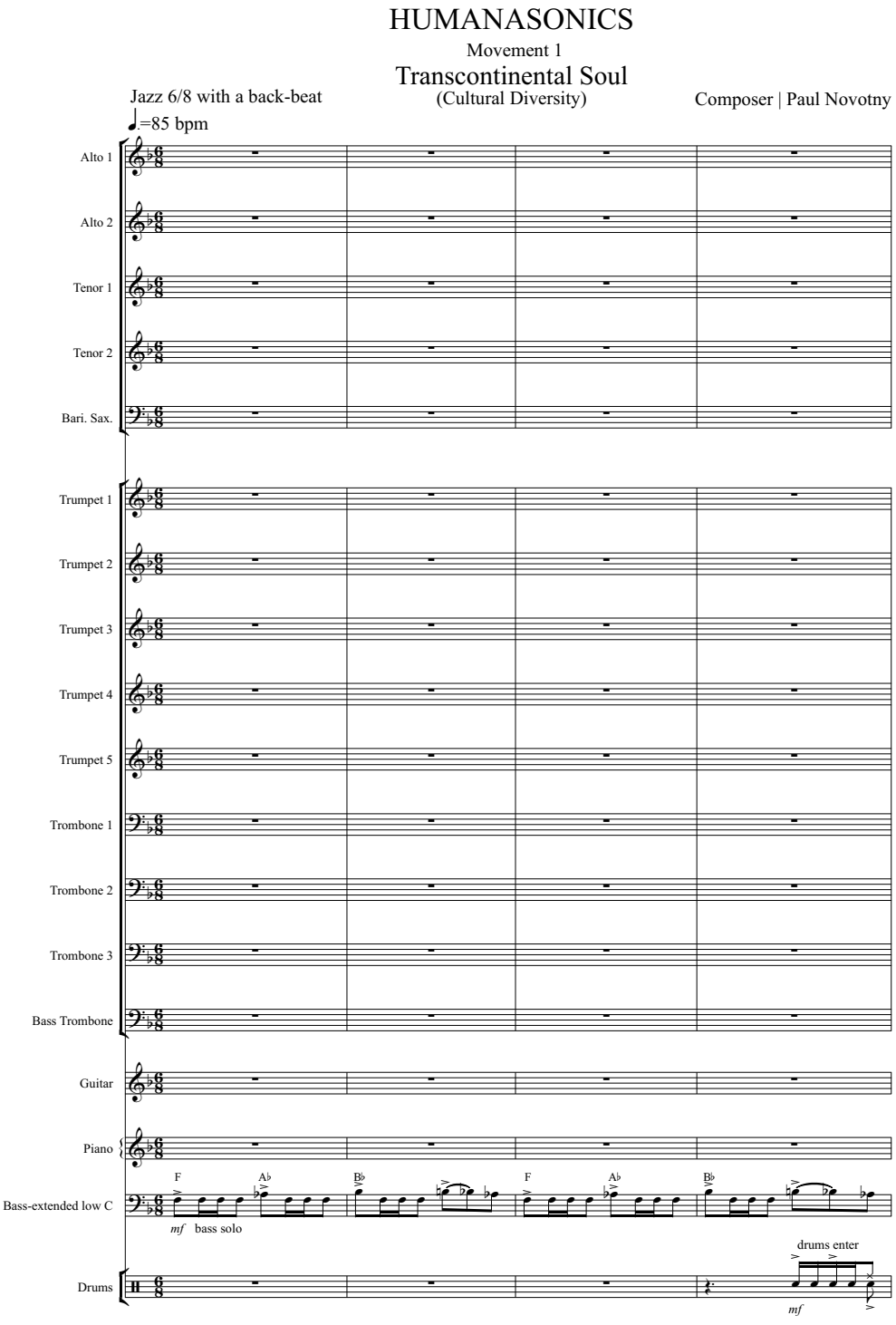
Clarinet
Alto Saxophone
Tenor Saxophone 1&2
Baritone Saxophone
Trumpets 1-5
Trombones 1-4
Bass Trombone
Piano
Marimba
Guitar
String Bass, with a low C extension
Drums (soft mallets required)

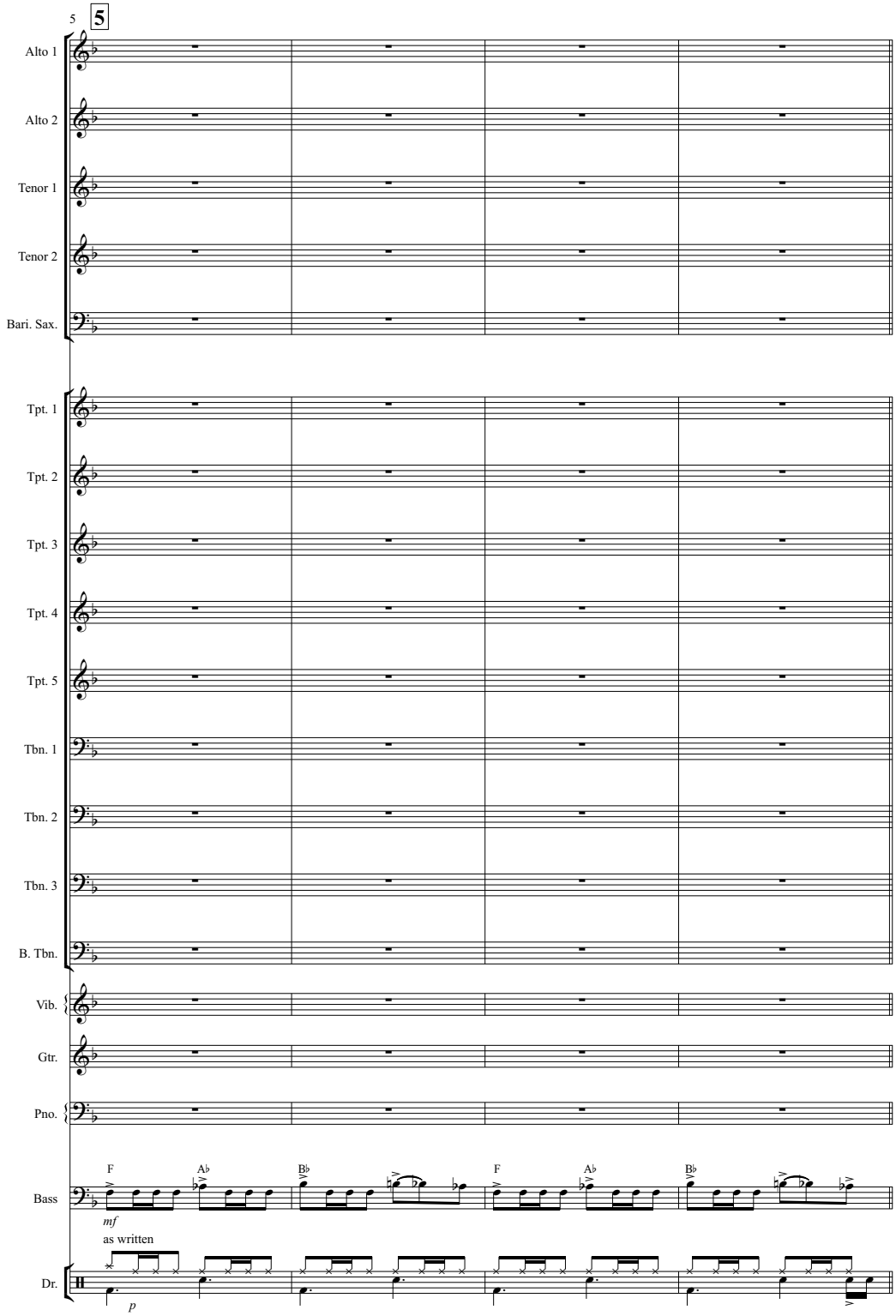
Movement IV

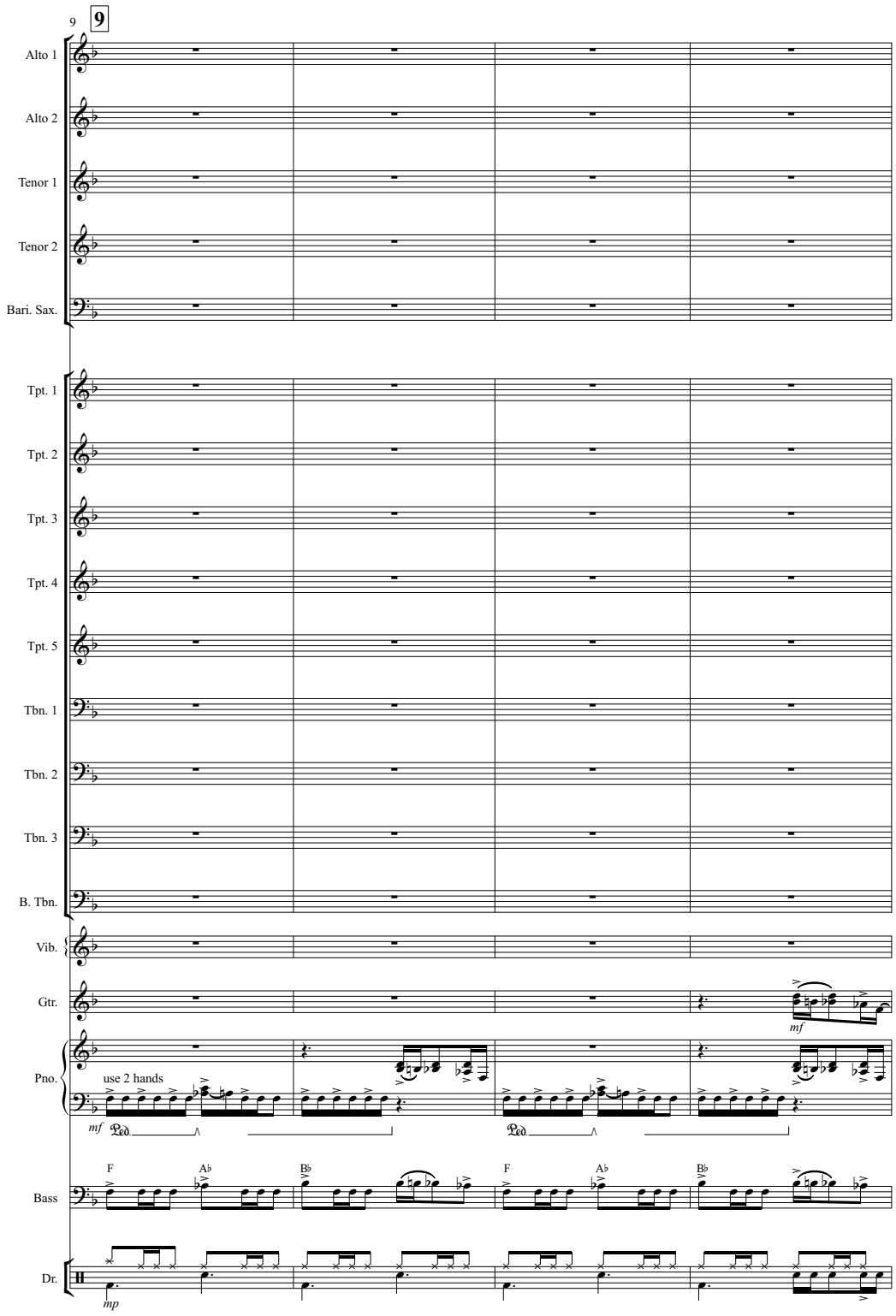
KINSHIP

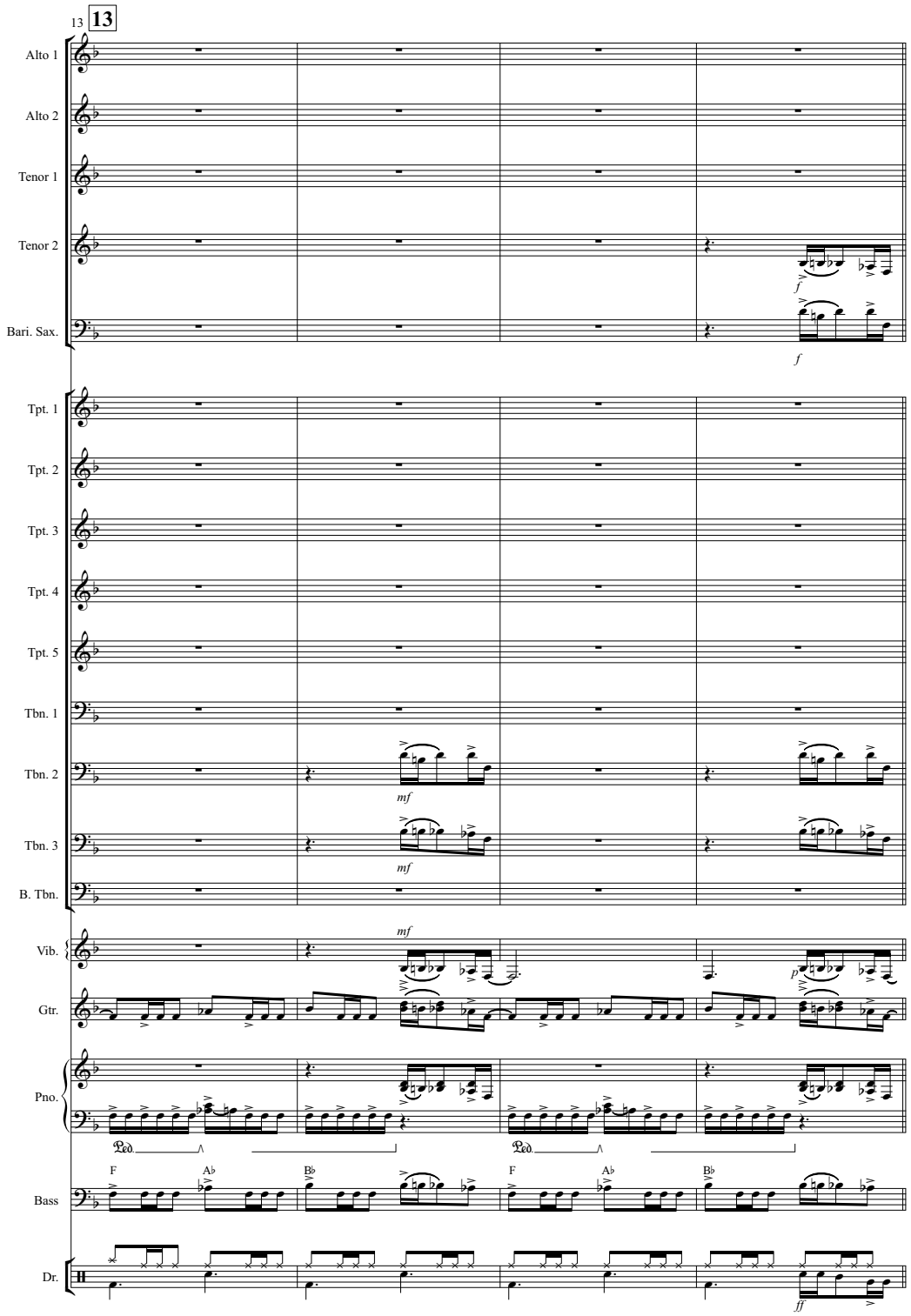
Flute & Alto Saxophone 1
Flute & Alto Saxophone 2
Clarinet and Tenor Saxophone 1
Clarinet and Tenor Saxophone 2
Bass Clarinet and Baritone Saxophone
Flugelhorn (feature soloist)
Trumpets 1-4 (mutes required)
Trombones 1-4 (mutes required)
Bass Trombone
Piano
Guitar
String Bass, with a low C extension
Drums (soft mallets required)

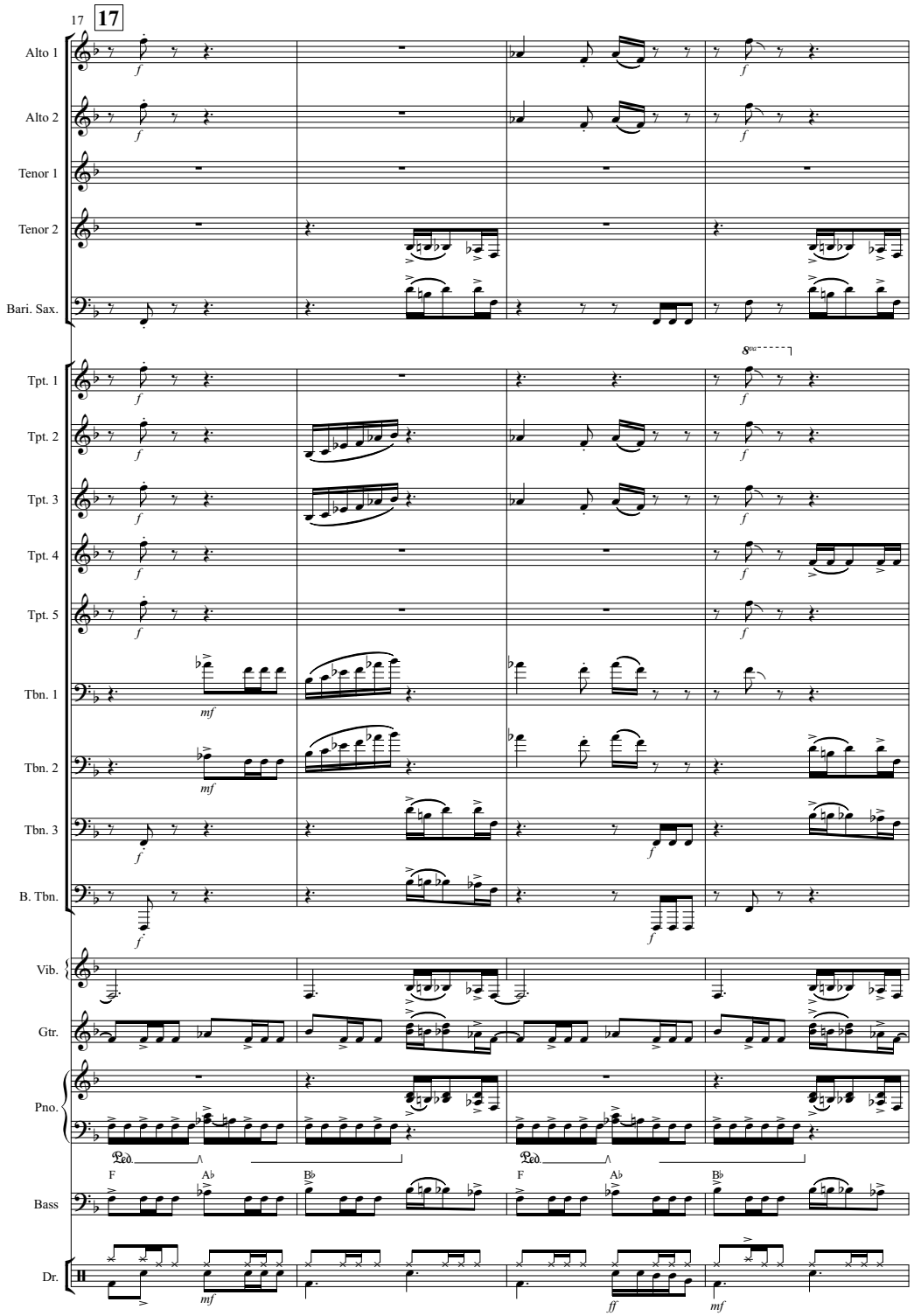
APPENDIX B: SCORE IMAGES

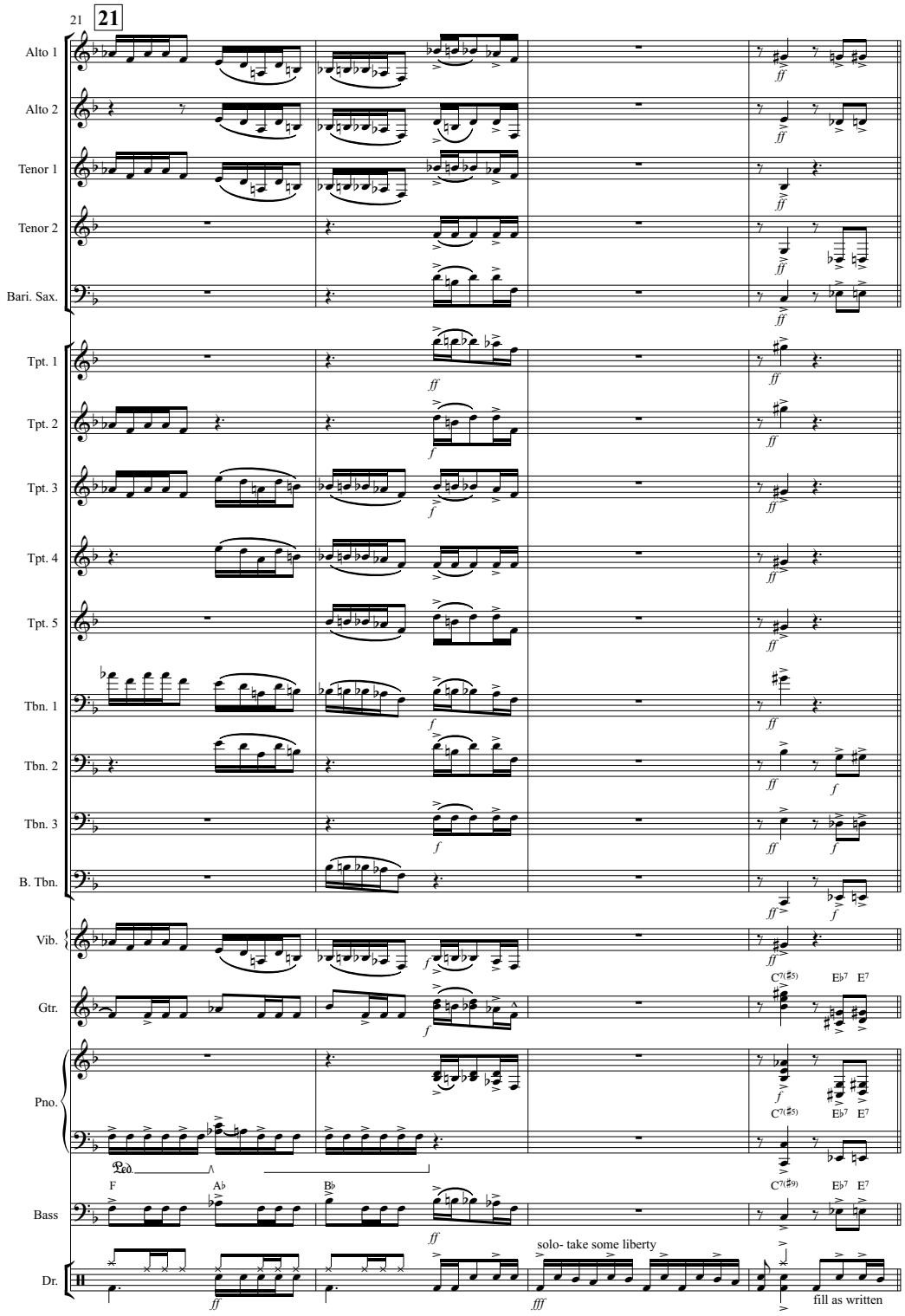


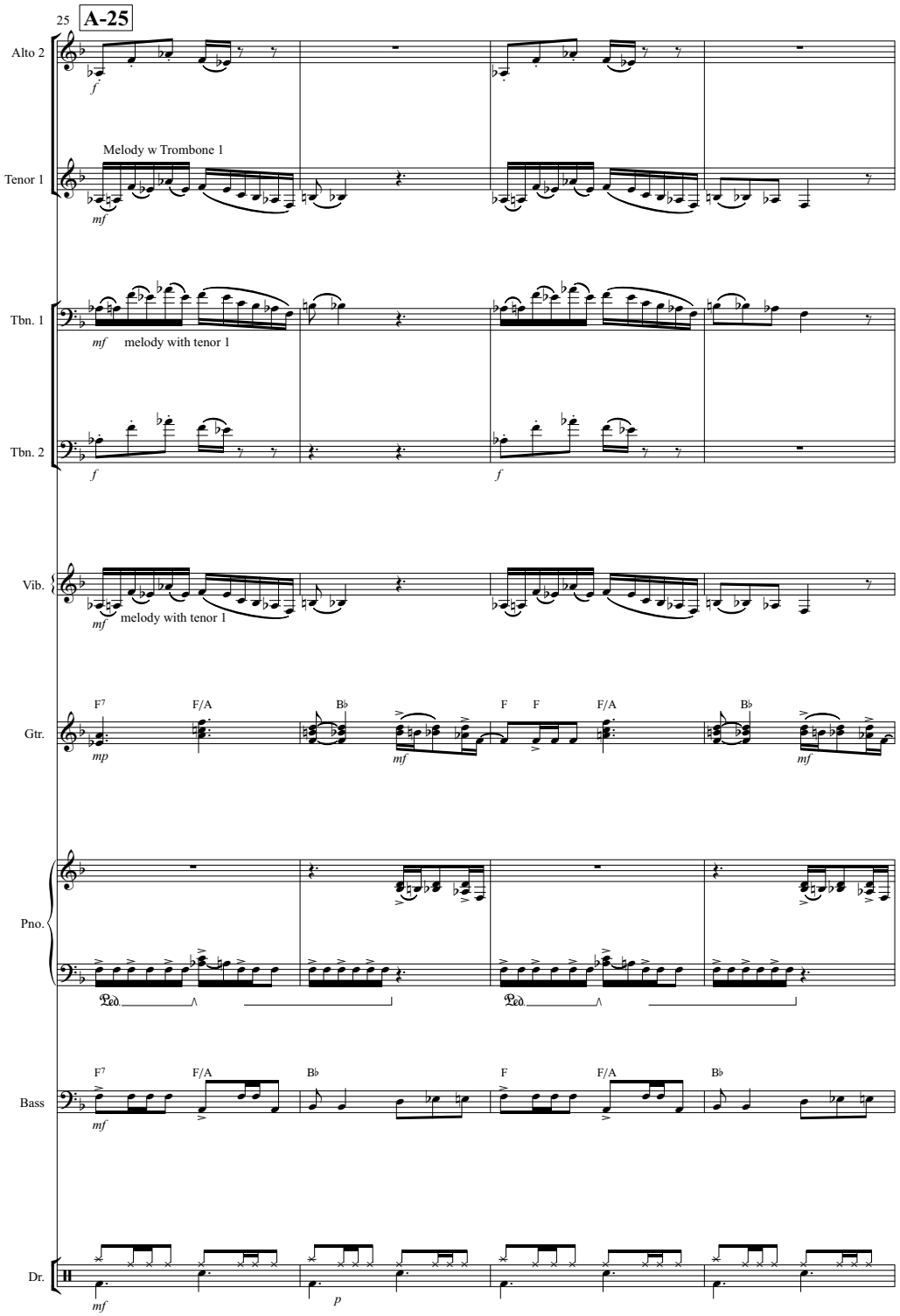

5
5
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F
A♭
B♭
F
A♭
B♭
mf
as written
p

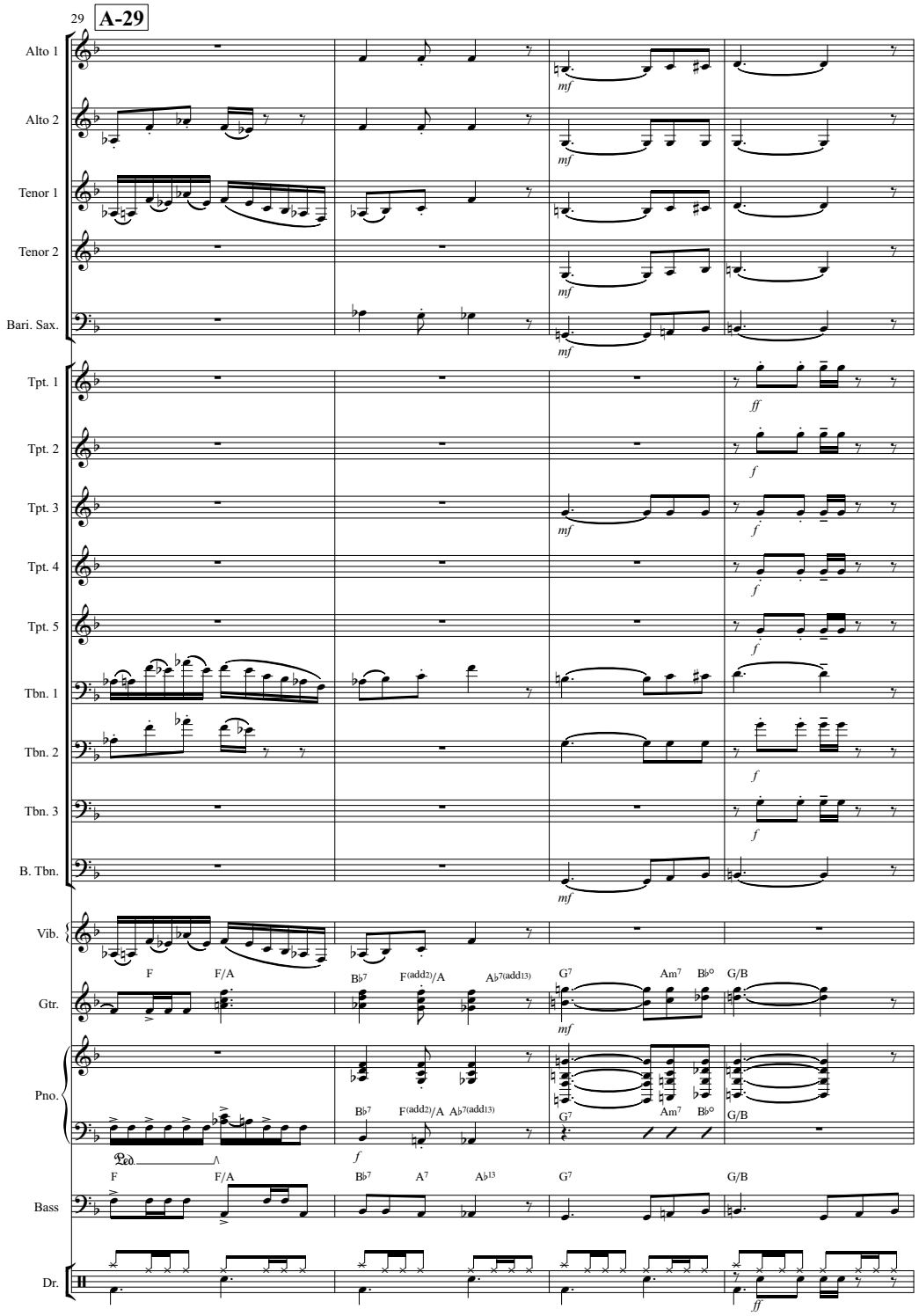

9
9
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
mf
Pno.
use 2 hands
mf
Bass
F
A♭
B♭
F
A♭
B♭
Dr.
mp

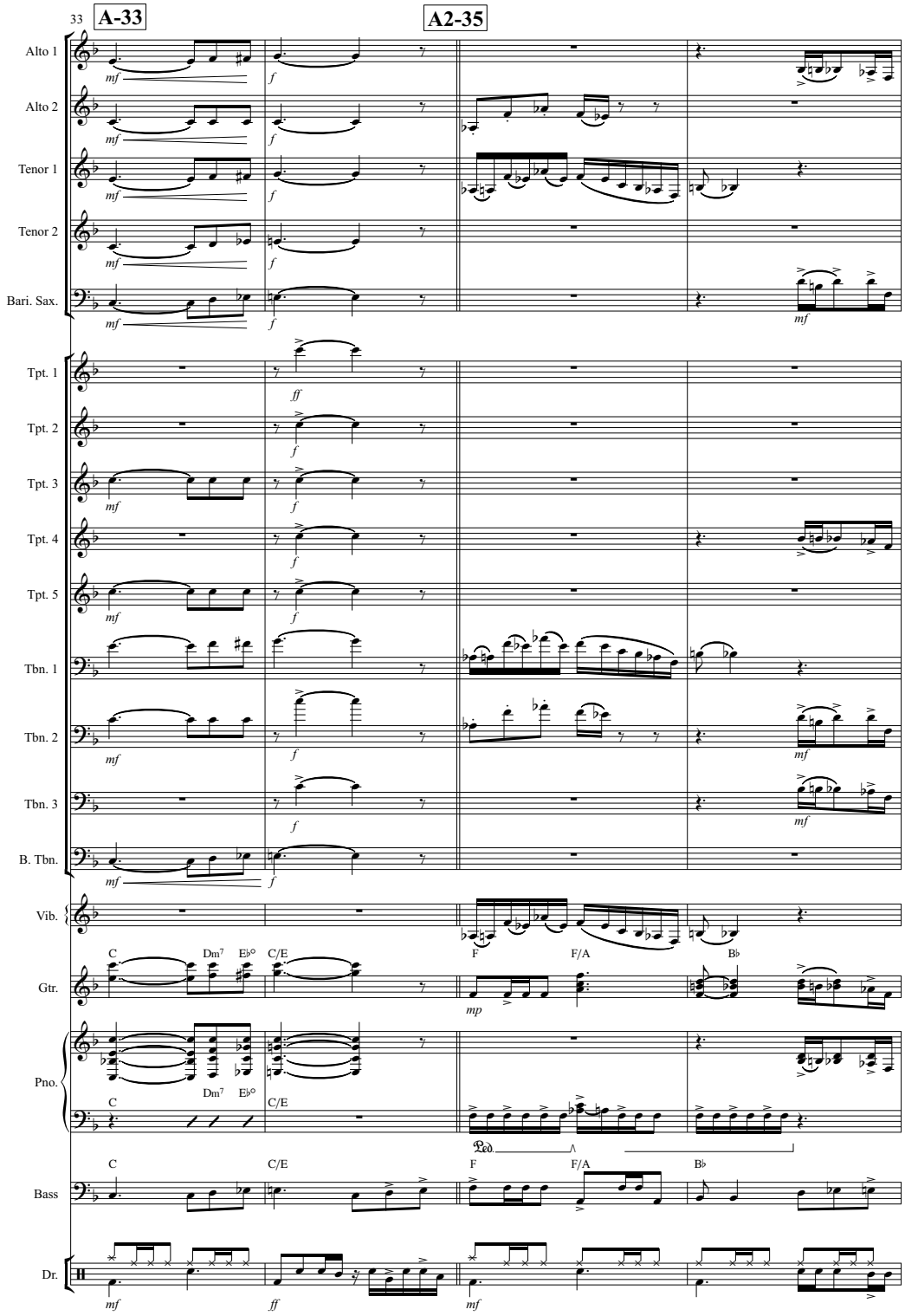

13
13
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
f
mf
p
ff
Ped
F
A♭
B♭

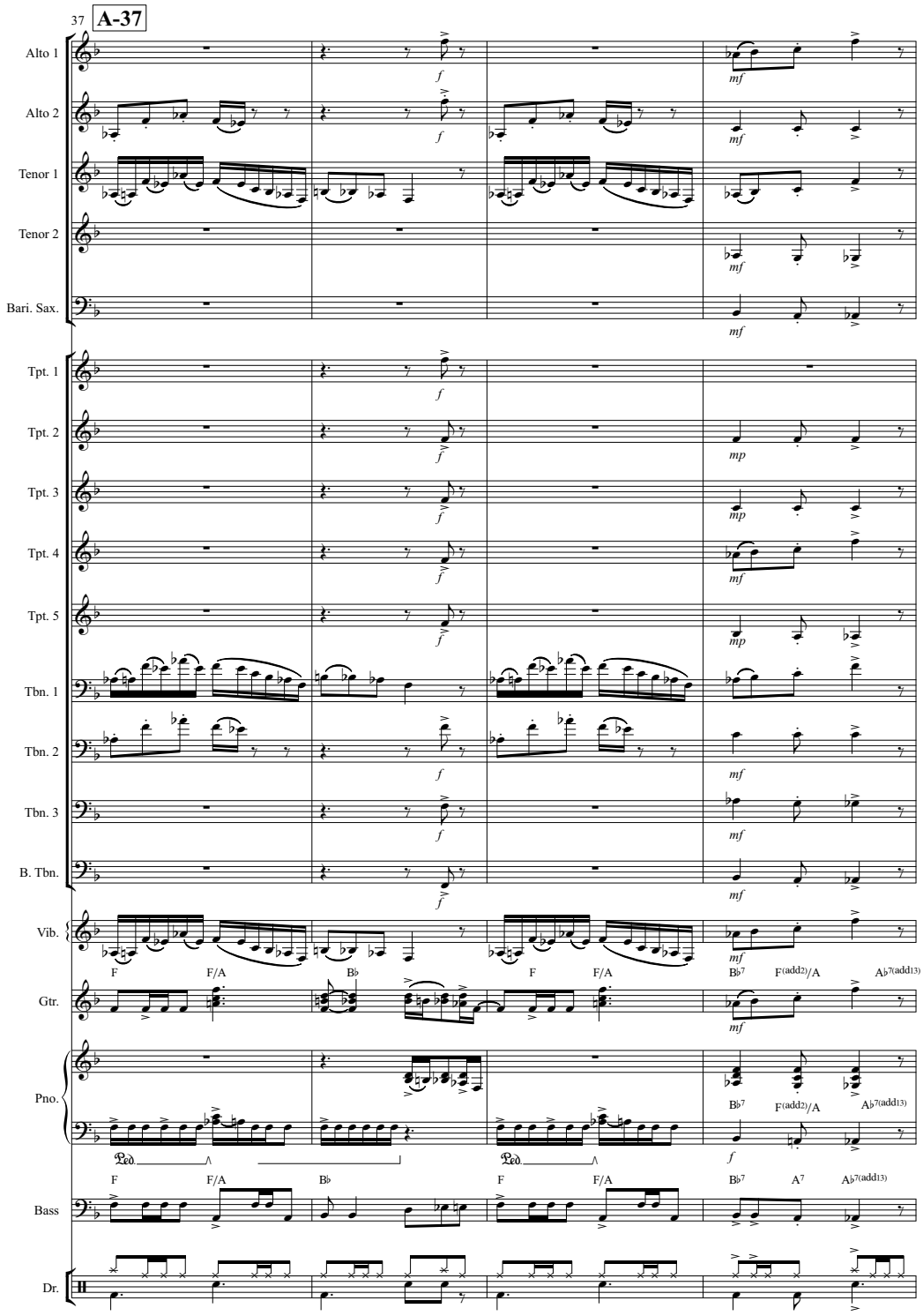

17
17
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F
A♭
B♭
F
A♭
B♭

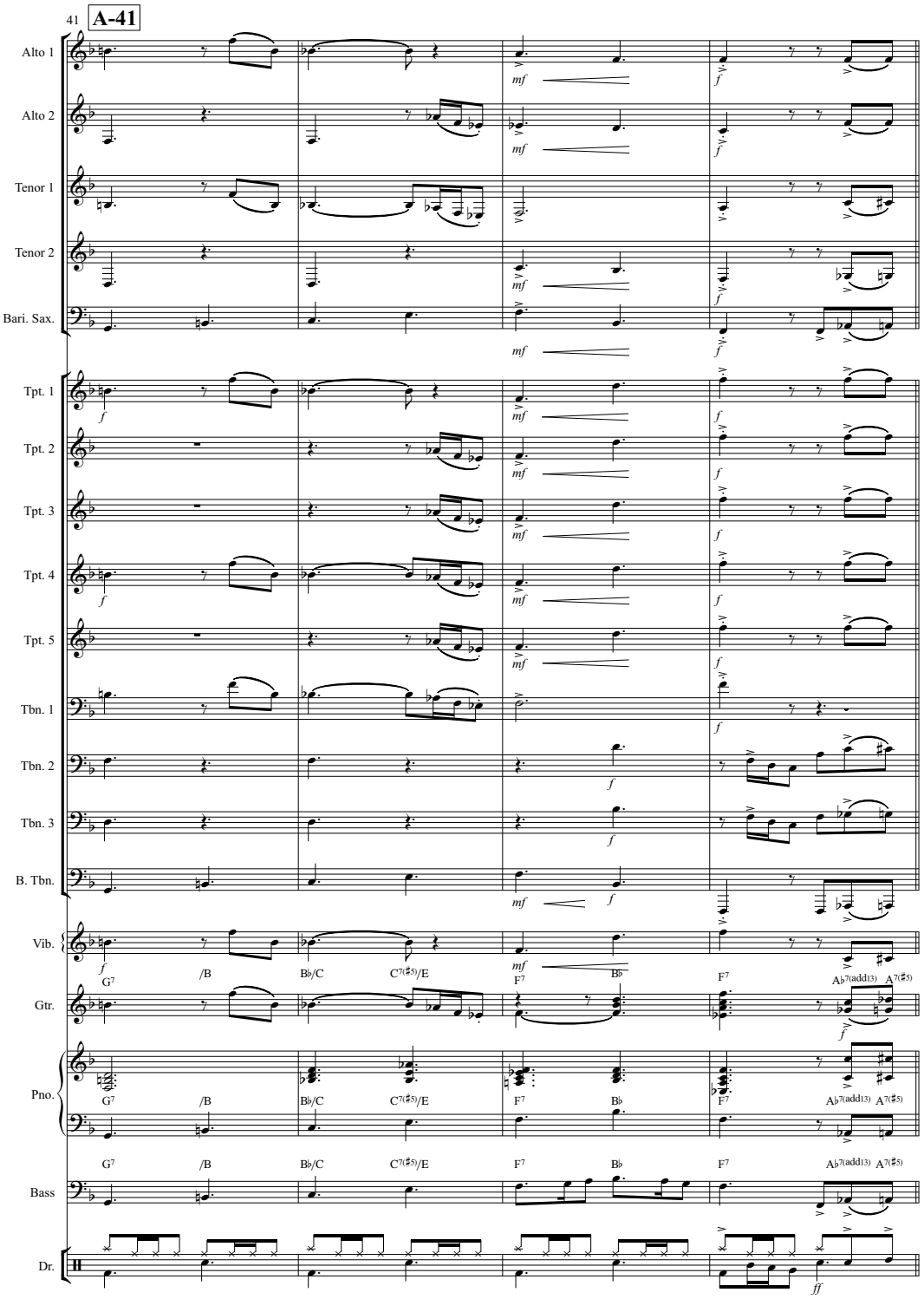

21
21
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
C7(♯5)
E♭7
E7
C7(♯9)
F
A♭
B♭
solo- take some liberty
fill as written

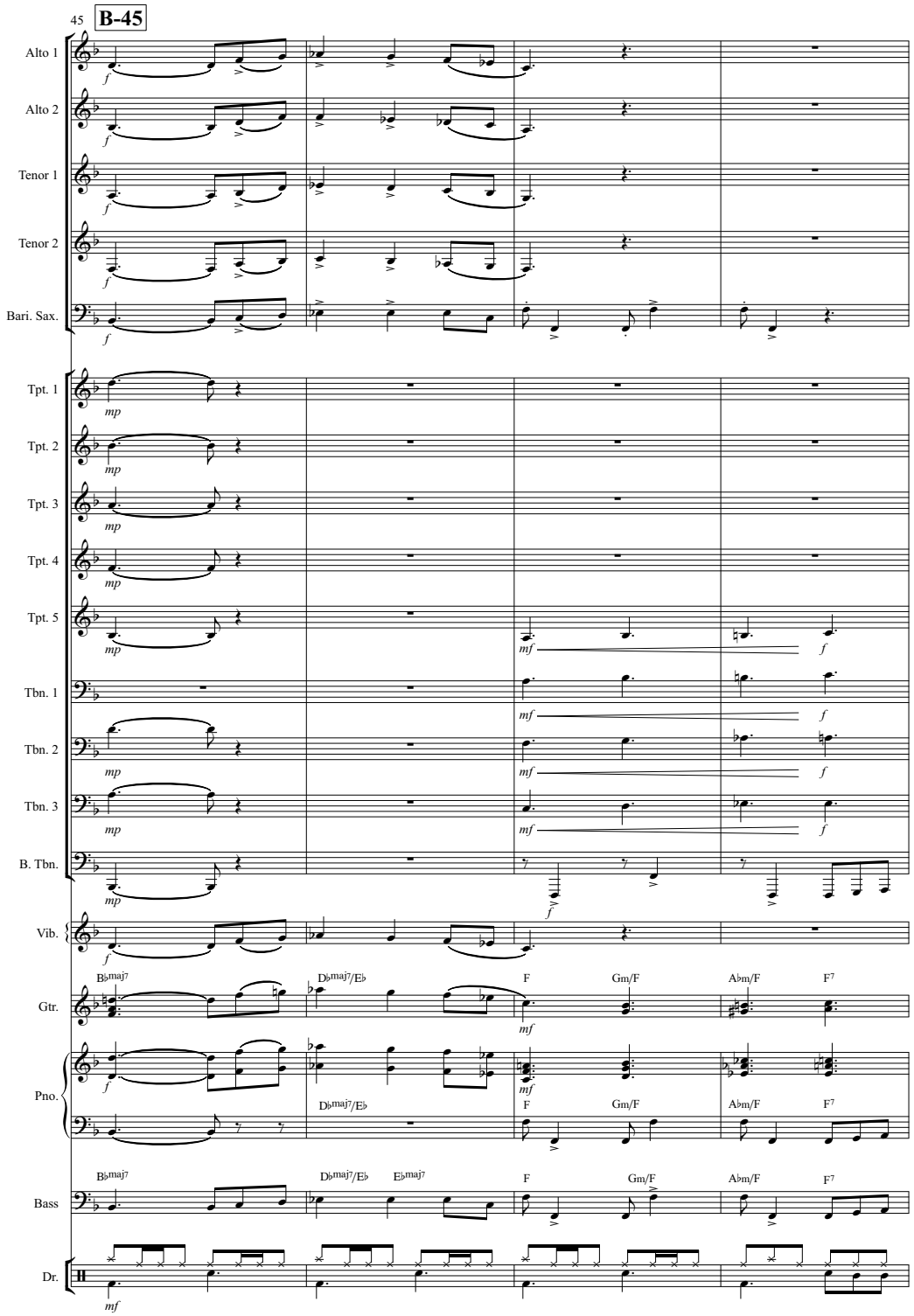

25
A-25
Alto 2
Tenor 1
Melody w Trombone 1
Tbn. 1
melody with tenor 1
Tbn. 2
Vib.
melody with tenor 1
Gtr.
F7
F/A
B♭
F
F
F/A
B♭
Pno.
Ped
Bass
F7
F/A
B♭
F
F/A
B♭
Dr.

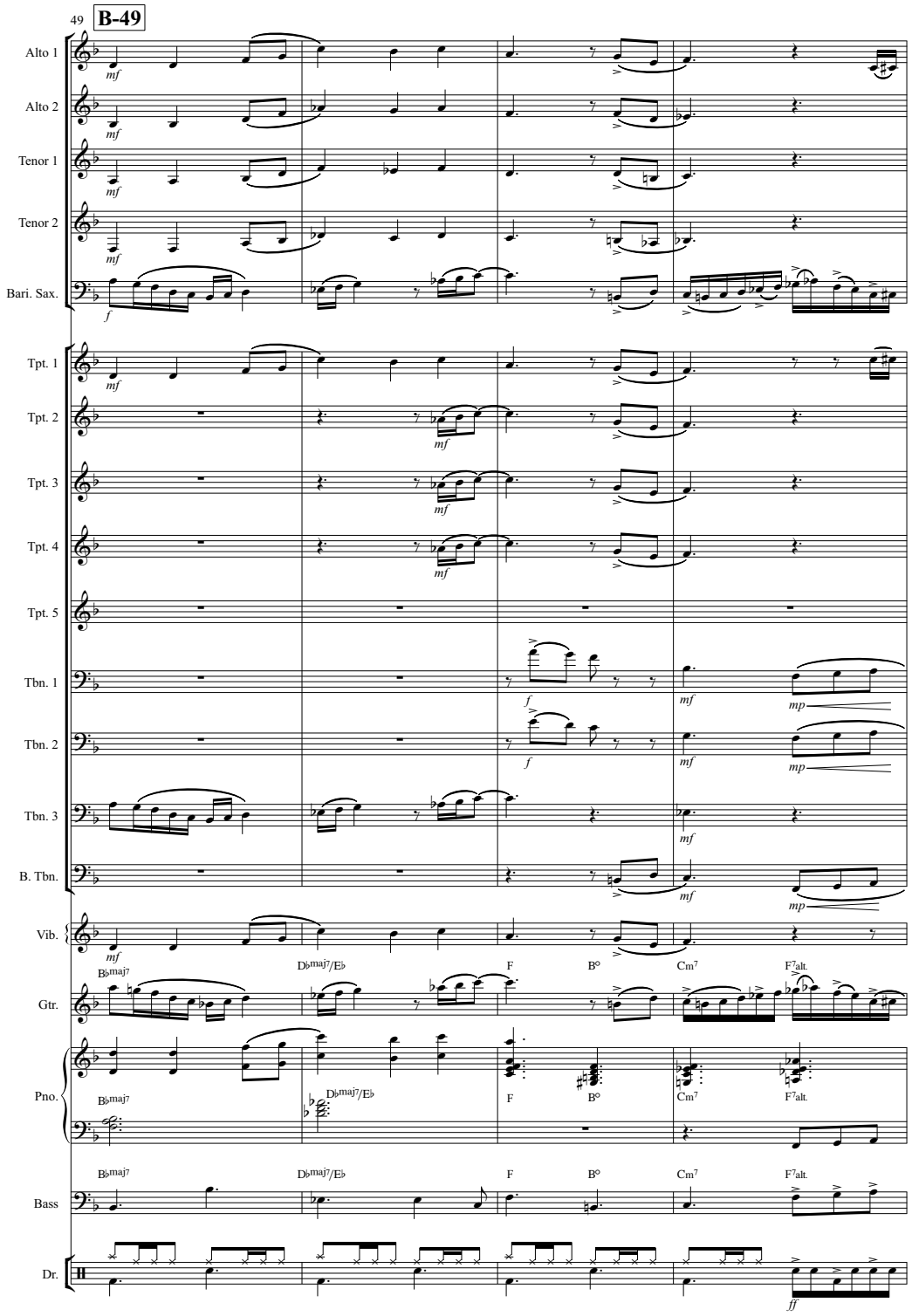

29
A-29
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
ff
f
F
F/A
B♭7
F(add2)/A
A♭7(add13)
G7
Am7
B♭°
G/B
A7
A♭13
Ped.

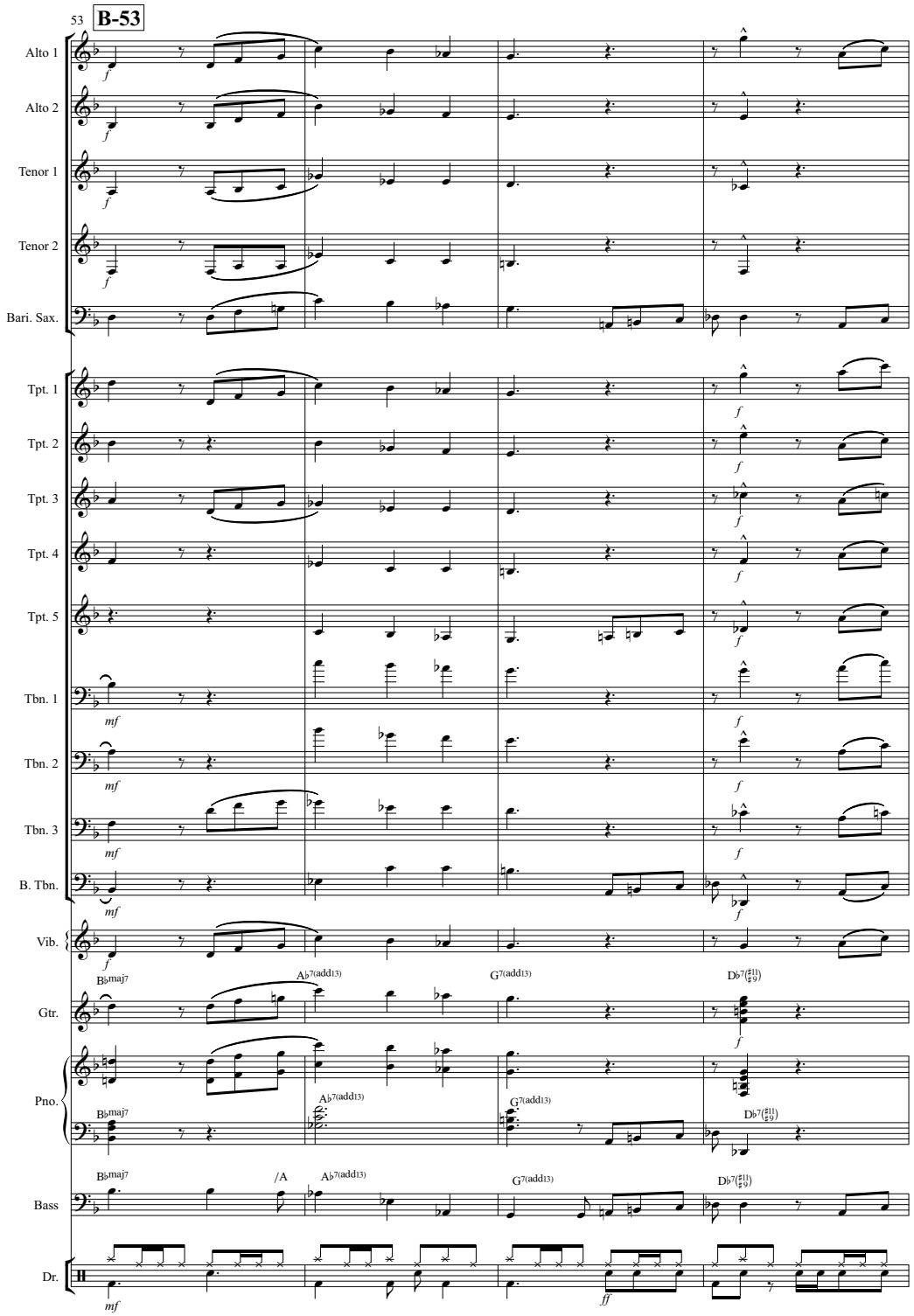

33
A-33
A2-35
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
C
Dm7
E♭°
C/E
F
F/A
B♭
mf
f
ff
mp
Ped.

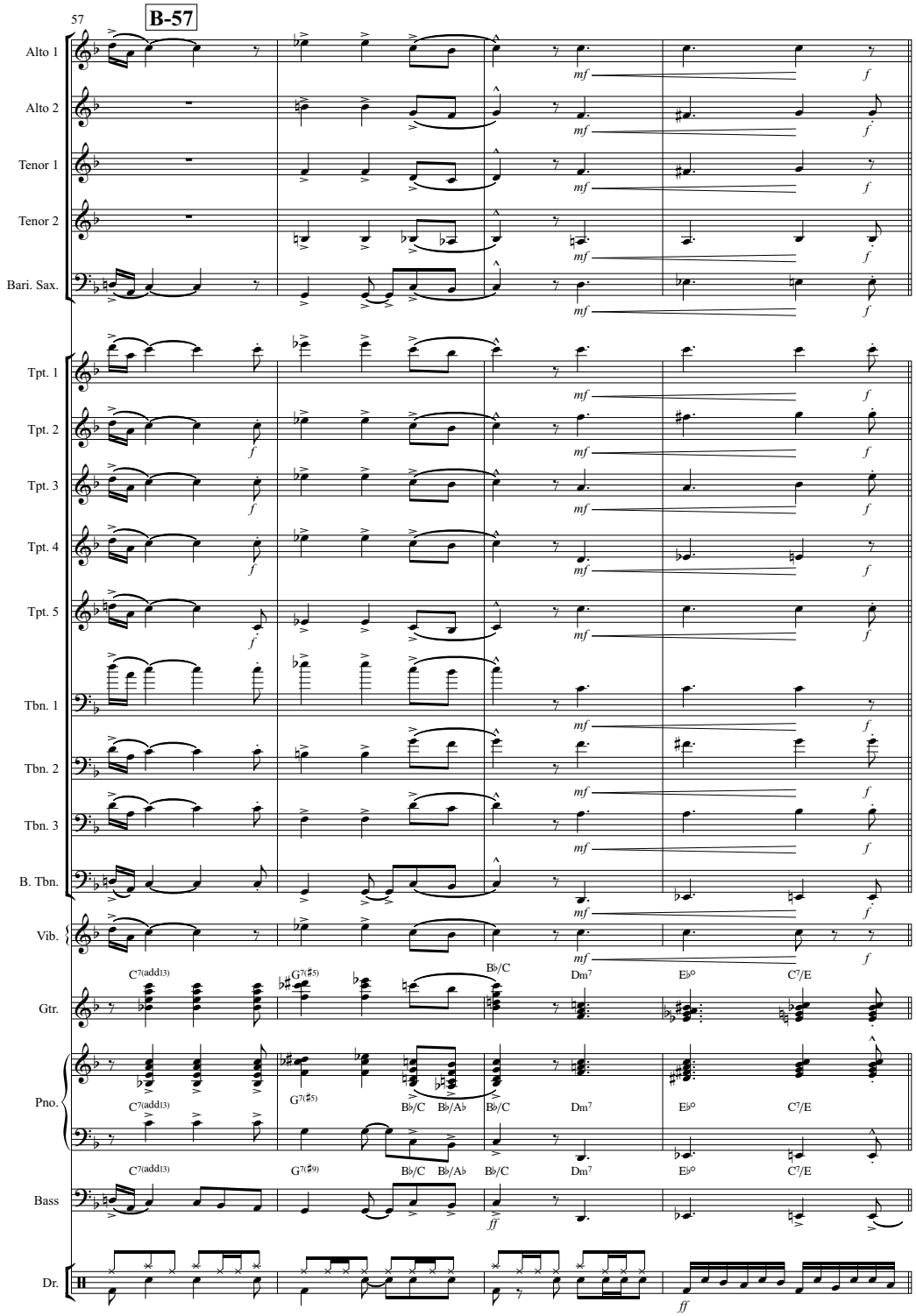

37
A-37
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
f
mf
mp
F
F/A
B♭
B♭7
F(add2)/A
A♭7(add13)
A7
Ped.

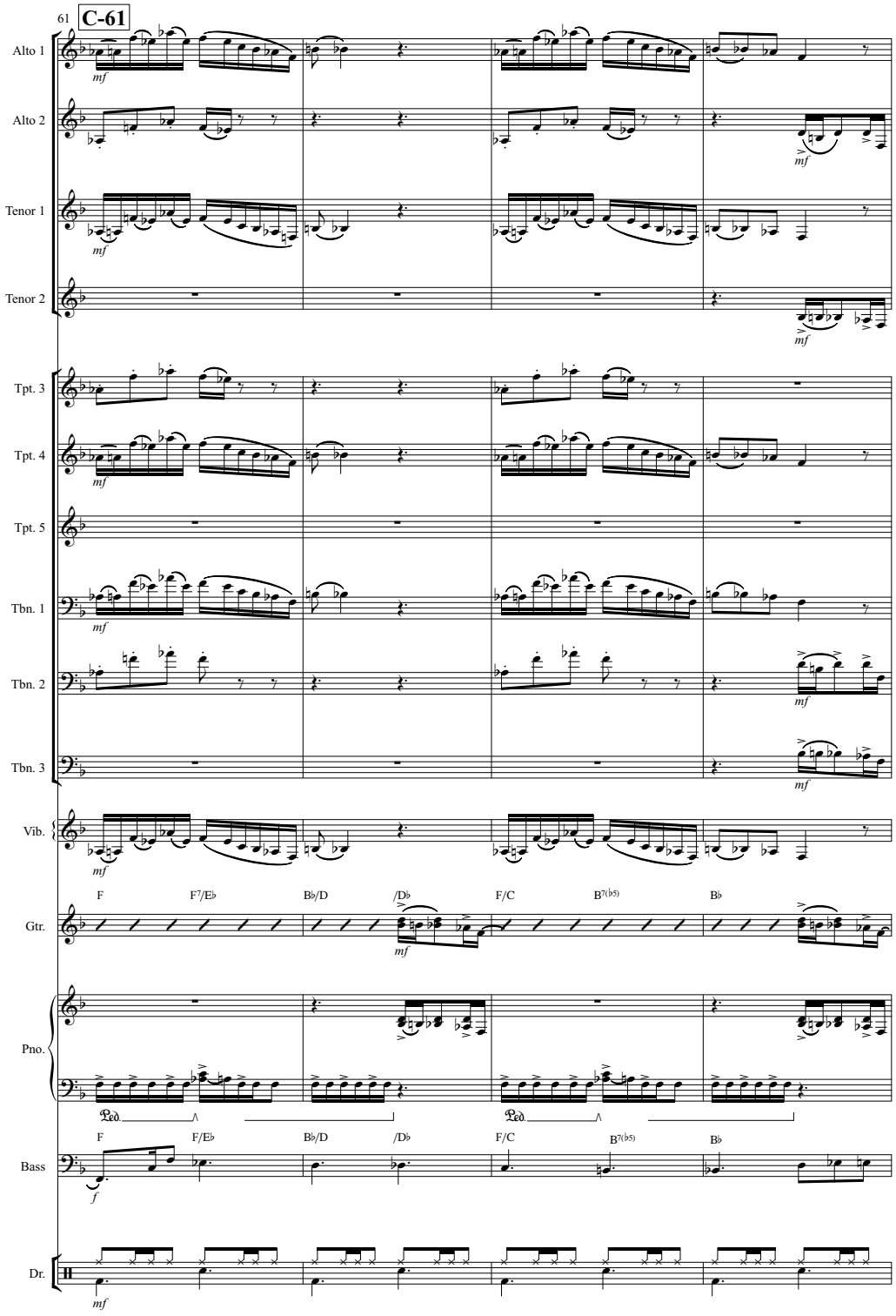

41
A-41
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
ff
G7
/B
B♭/C
C7(♯5)/E
F7
B♭
A♭7(add13)
A7(♯5)

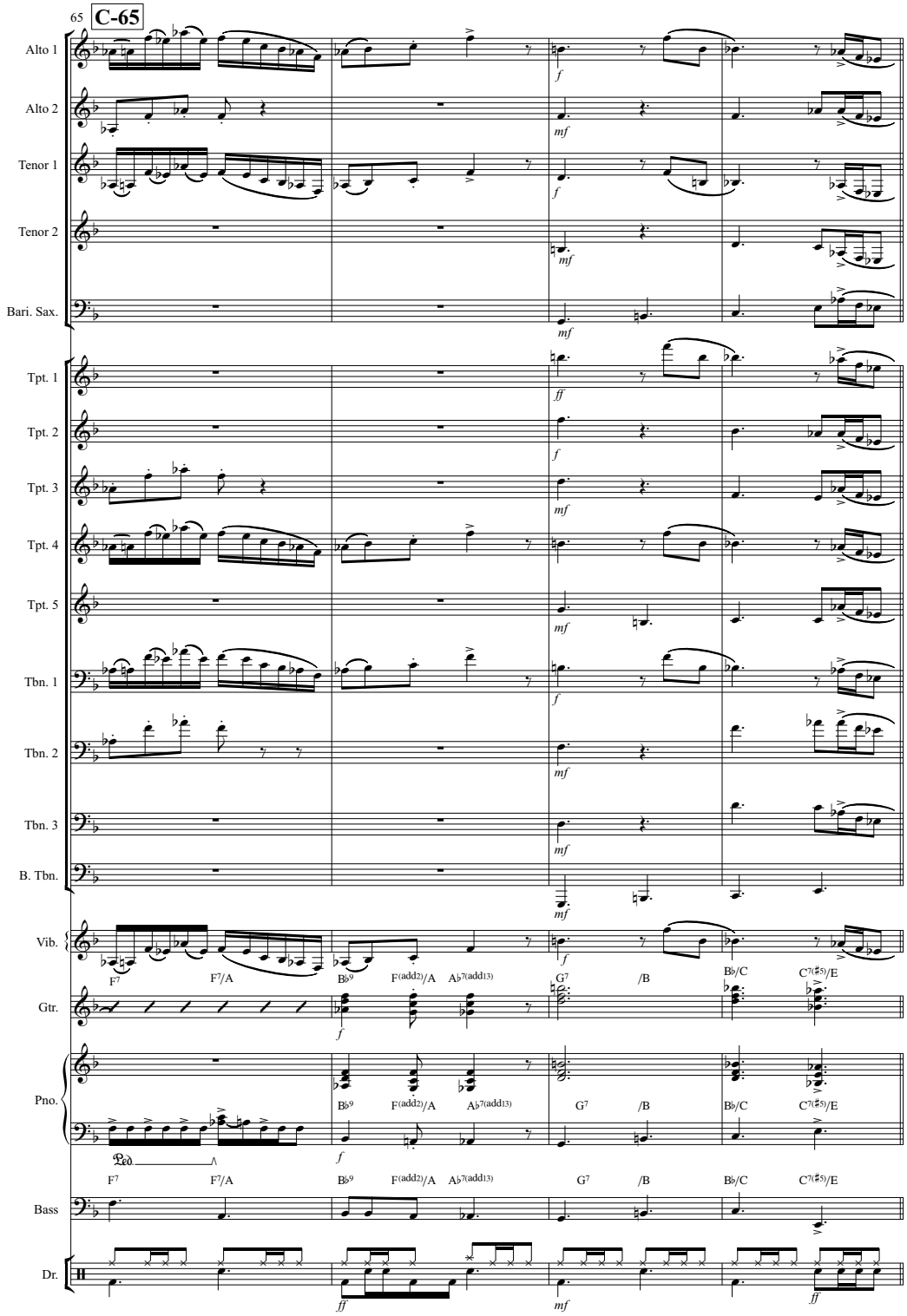

45
B-45
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
B♭maj7
D♭maj7/E♭
E♭maj7
F
Gm/F
A♭m/F
F7

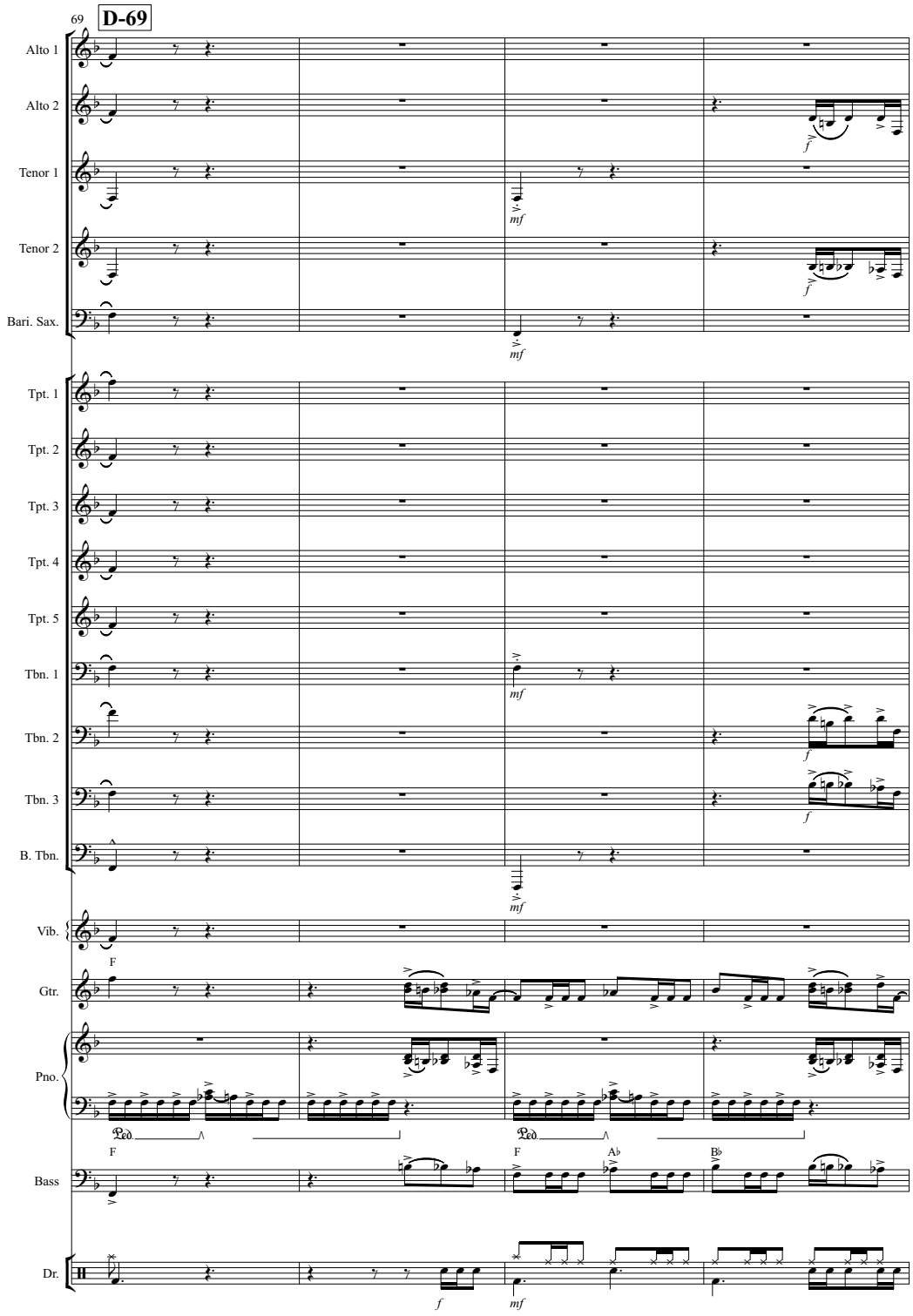

49
B-49
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
B♭maj7
D♭maj7/E♭
F
B°
Cm7
F7alt.

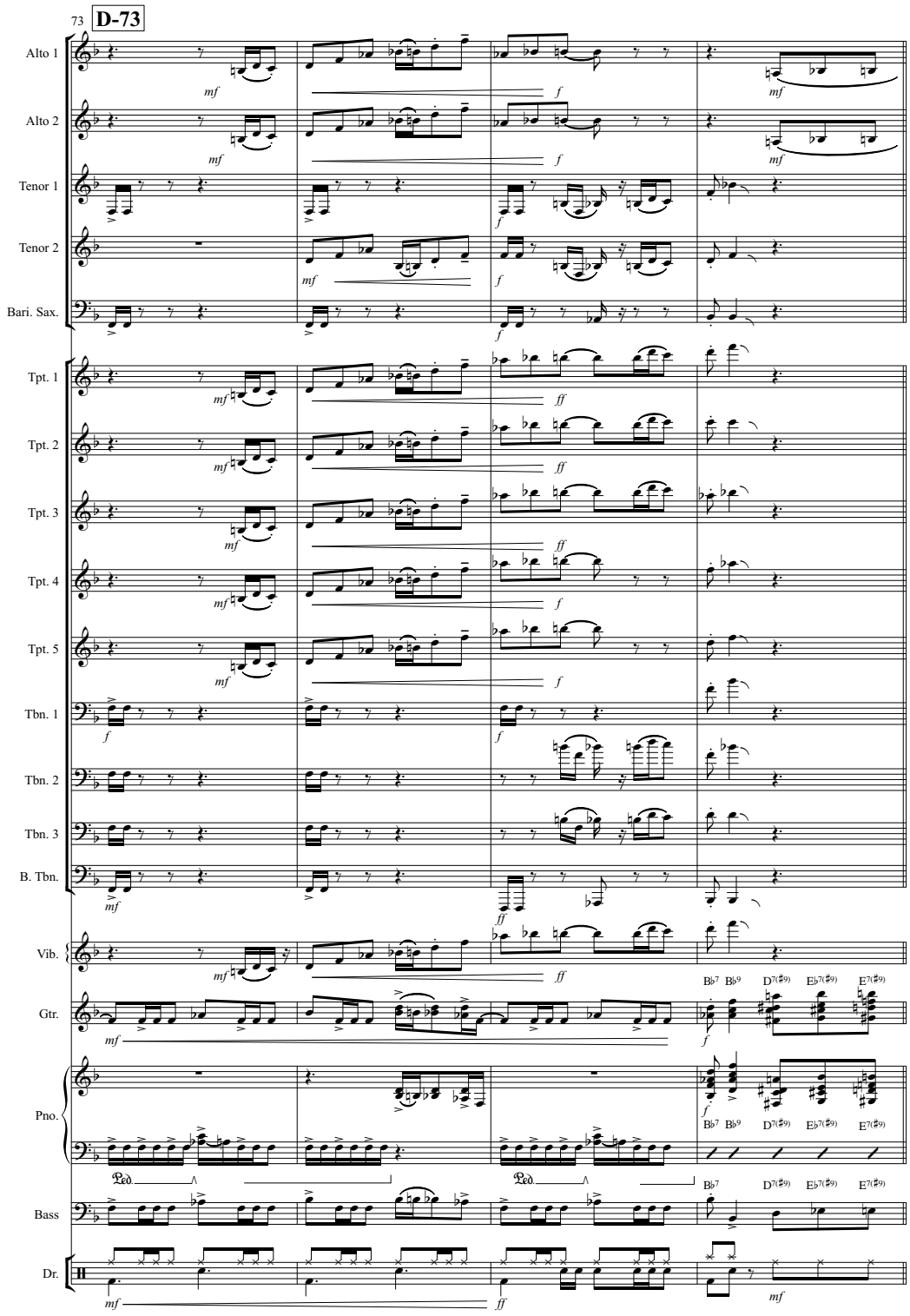

53
B-53
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
B♭maj7
A♭7(add13)
G7(add13)
D♭7(♯11/♯9)
/A
f
mf
ff

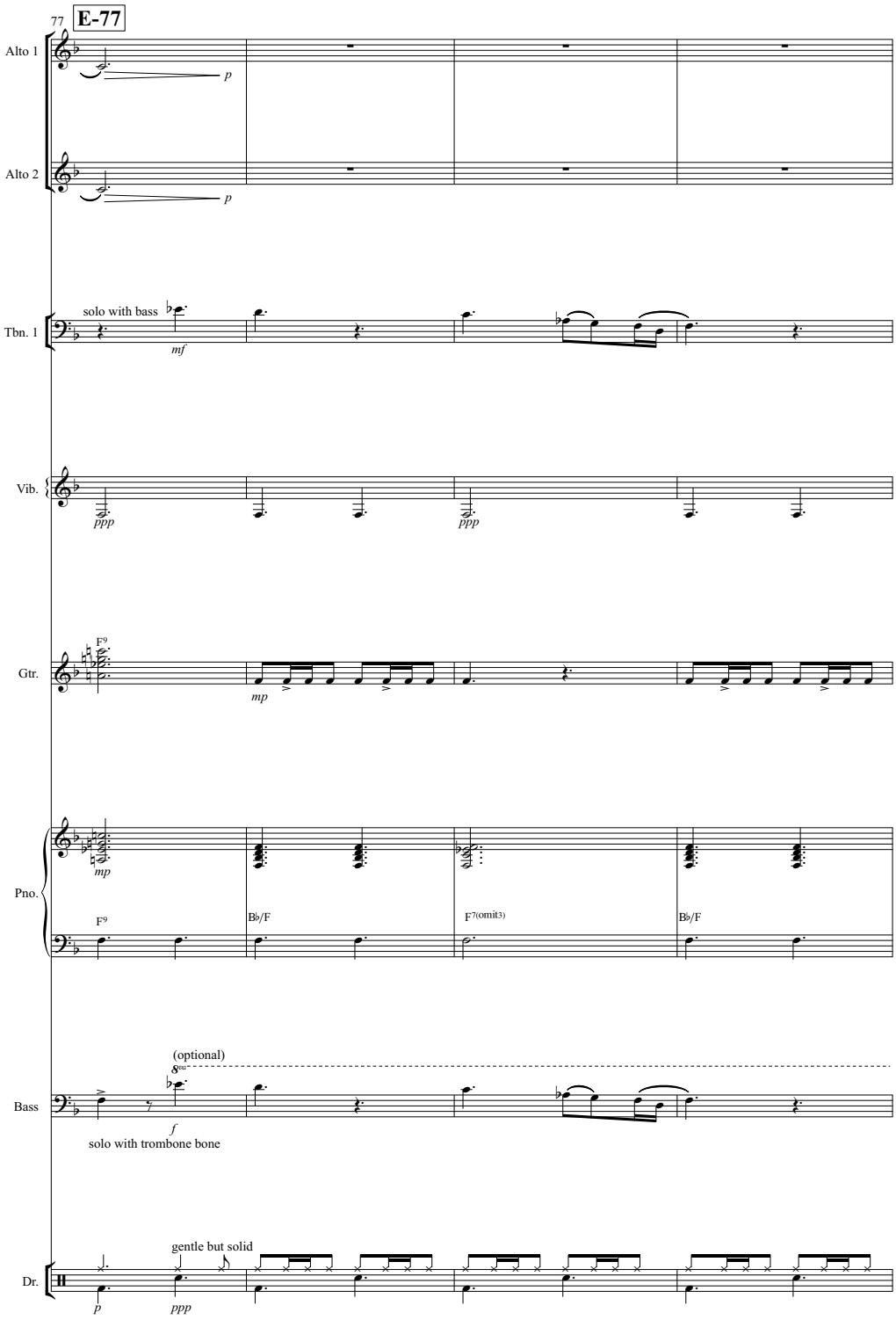

57
B-57
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
ff
C7(add13)
G7(♯5)
G7(♯9)
B♭/C
B♭/A♭
Dm7
E♭°
C7/E

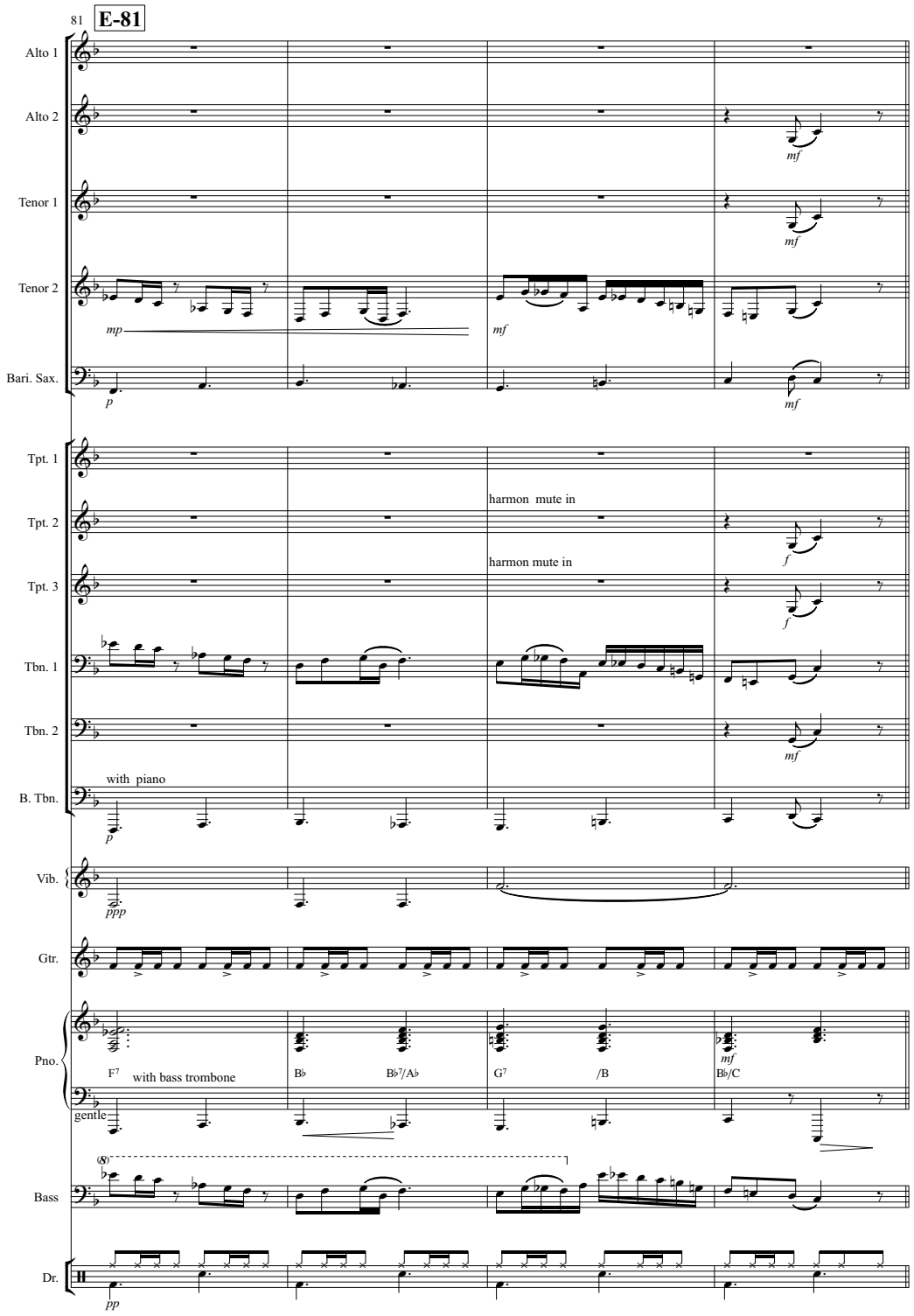

61
C-61
Alto 1
Alto 2
Tenor 1
Tenor 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
F
F7/E♭
B♭/D
/D♭
F/C
B7(♭5)
B♭
F/E♭

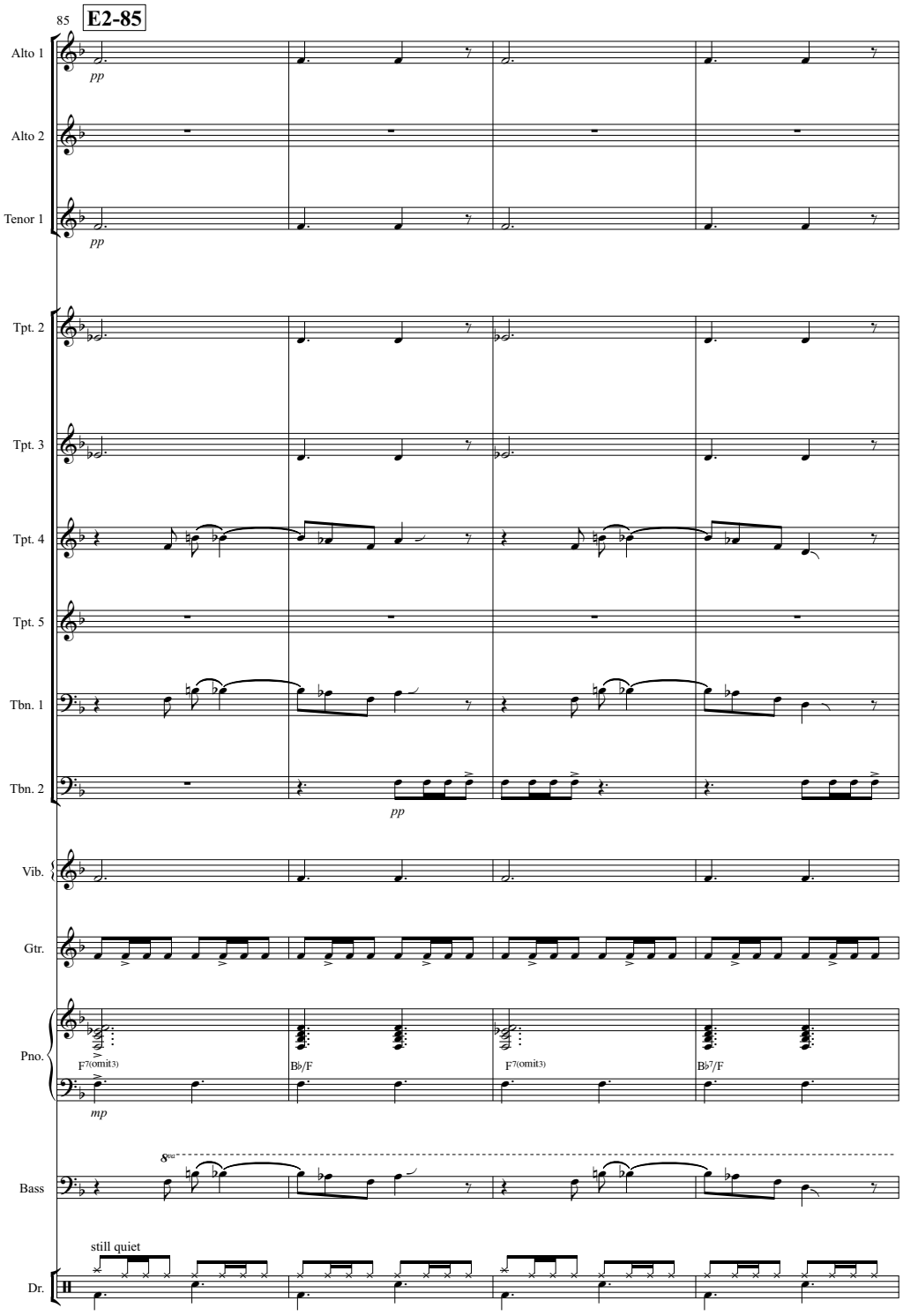

65
C-65
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F7
F7/A
B♭9
F(add2)/A
A♭7(add13)
G7
/B
B♭/C
C7(♯5)/E
Ped

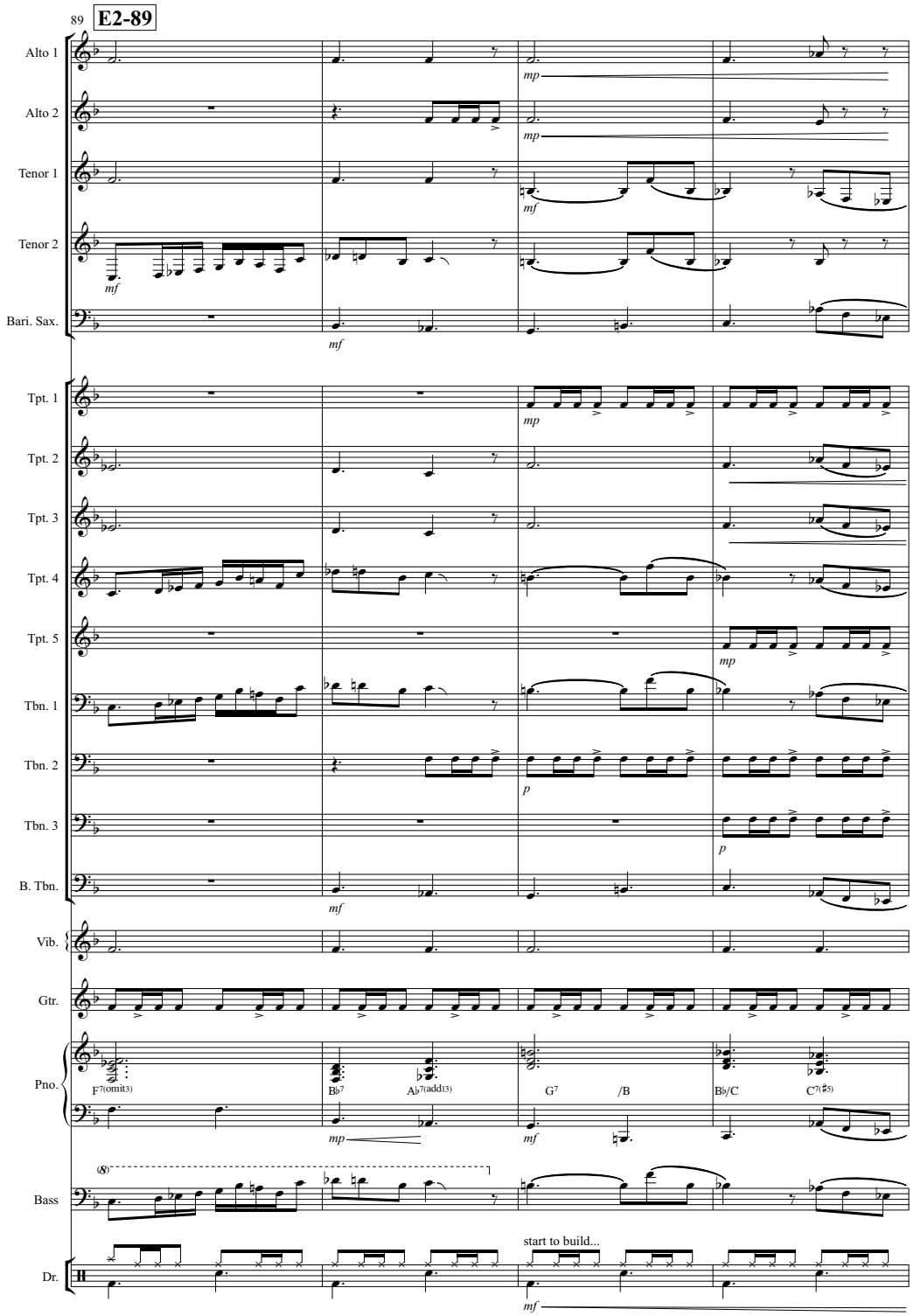

69
D-69
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
F
Ped.
A♭
B♭

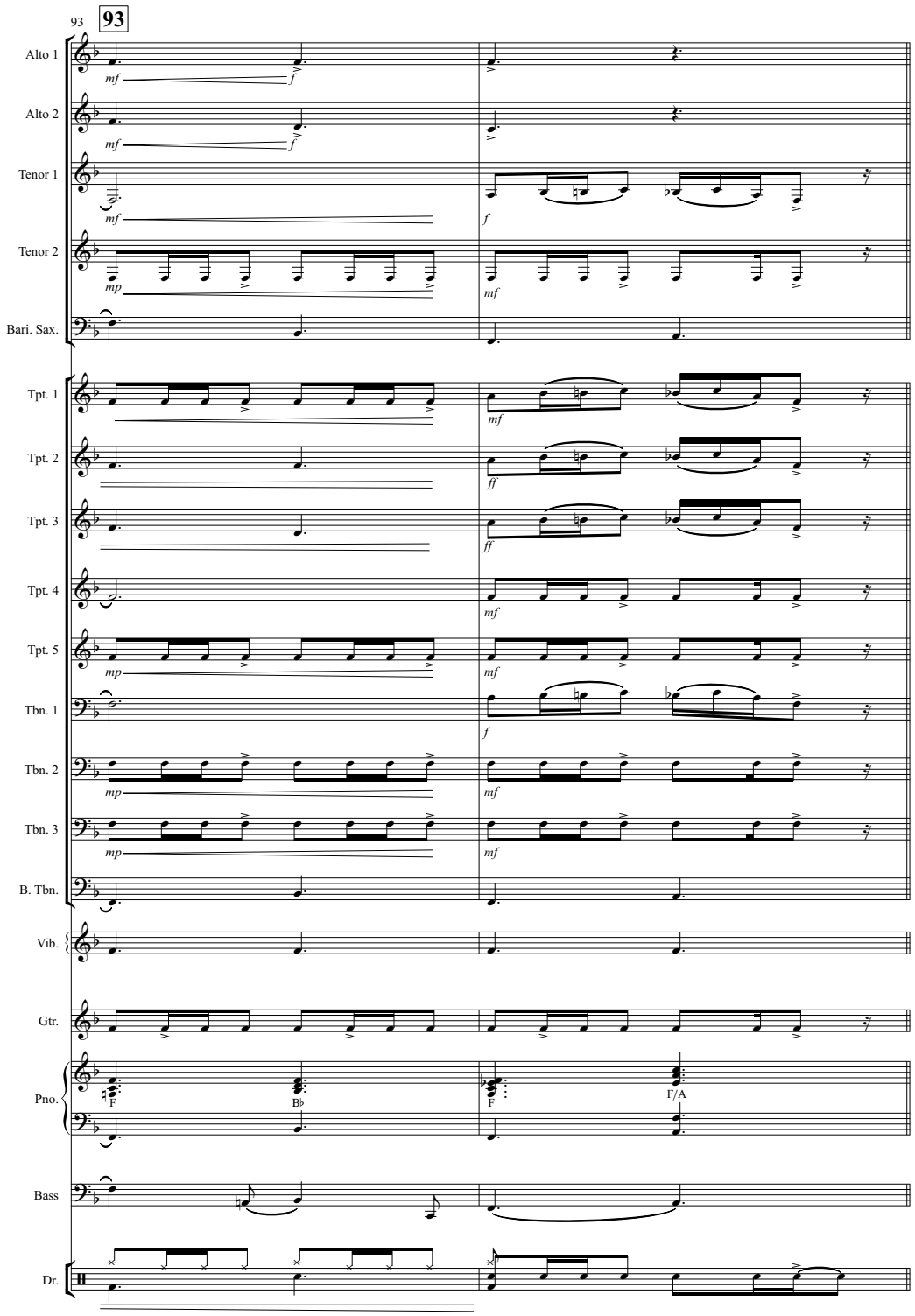

73
D-73
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
ff
B♭7 B♭9 D7(♯9) E♭7(♯9) E7(♯9)
Ped.

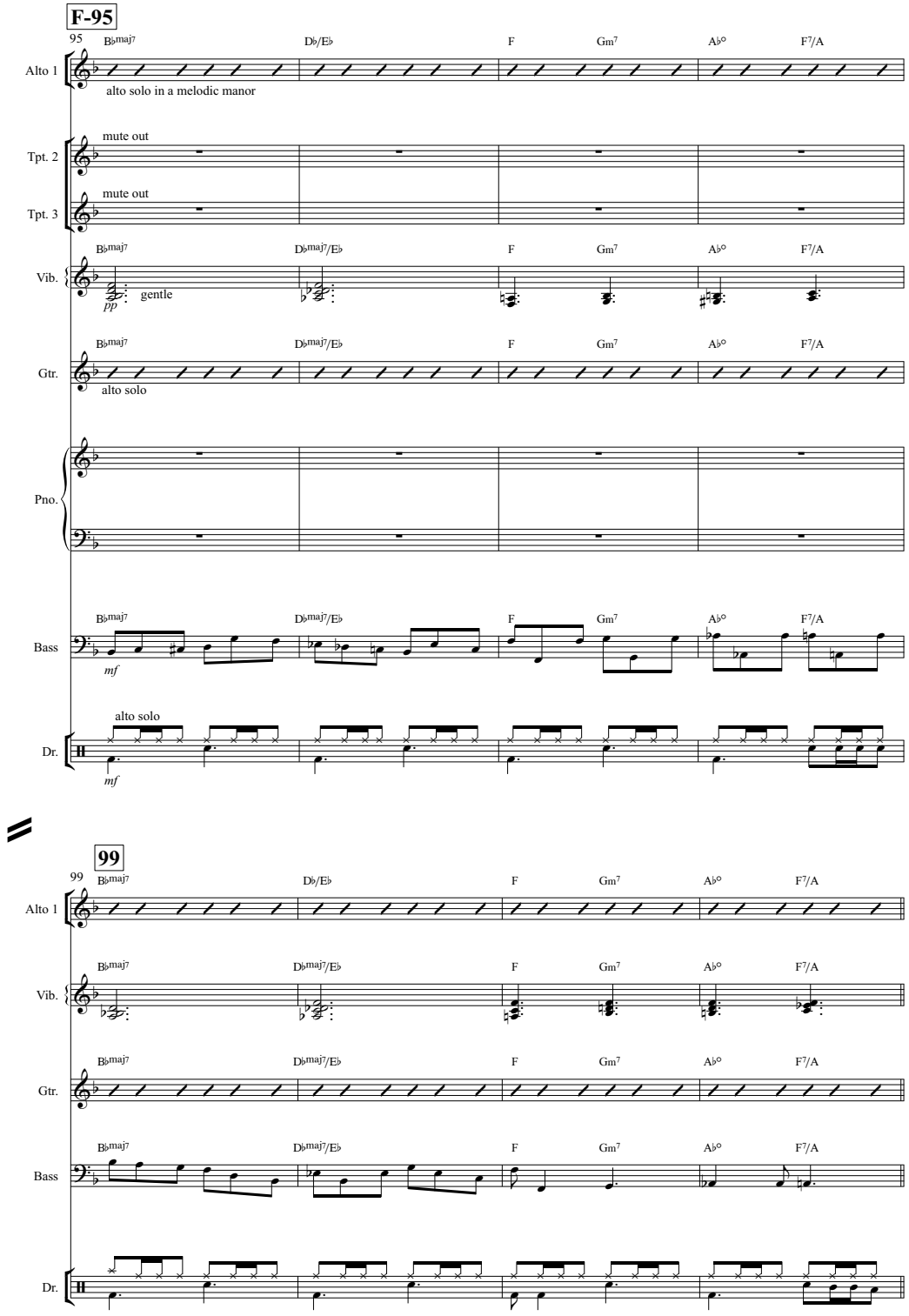

77
E-77
Alto 1
p
Alto 2
p
solo with bass
Tbn. 1
mf
Vib.
ppp
ppp
Gtr.
F9
mp
Pno.
mp
F9
B♭/F
F7(omit3)
B♭/F
(optional)
8va
Bass
f
solo with trombone bone
gentle but solid
Dr.
p
ppp

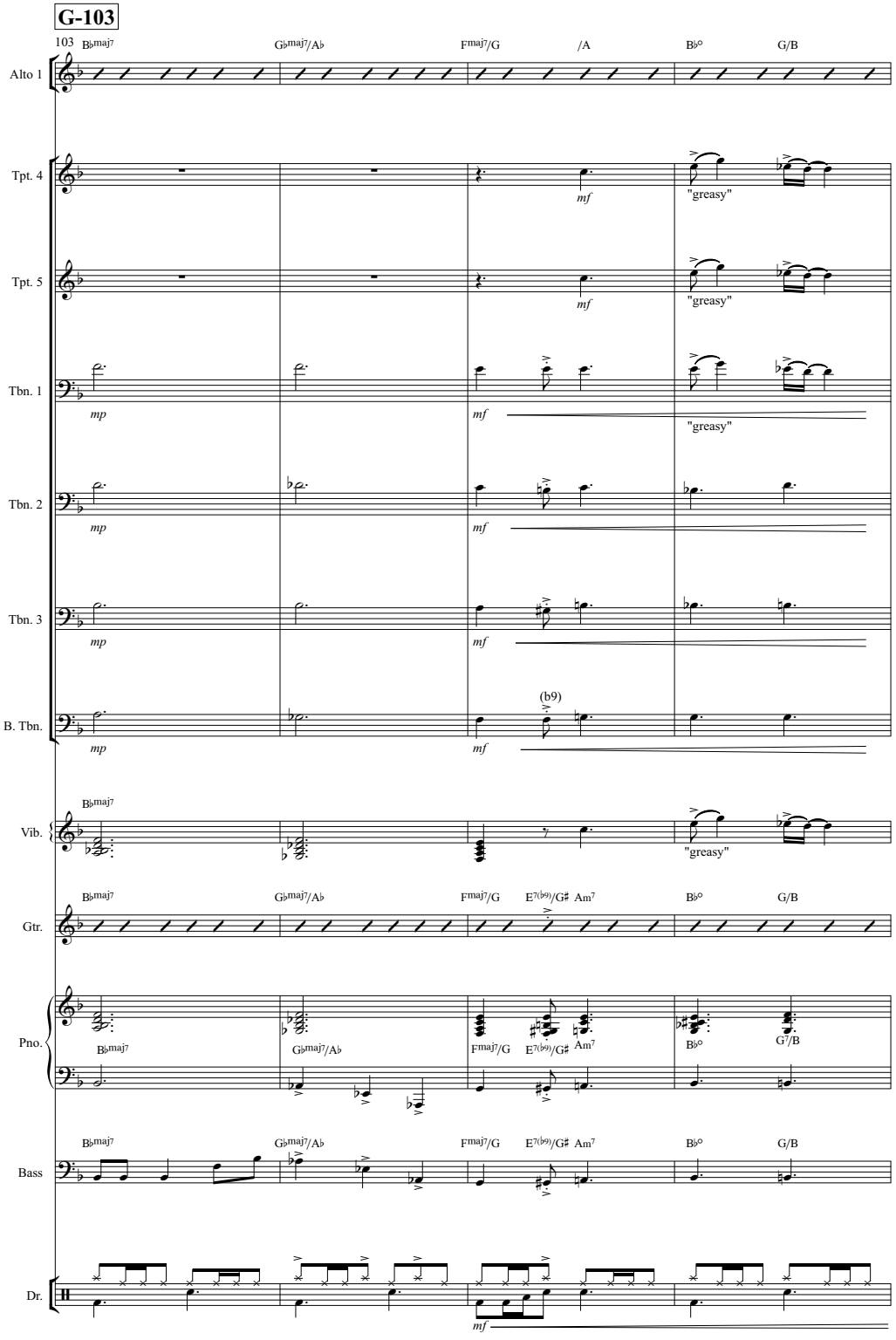

81
E-81
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1
Tbn. 2
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mp
mf
p
harmon mute in
f
with piano
ppp
F7
with bass trombone
B♭
B♭7/A♭
G7
/B
B♭/C
gentle
pp

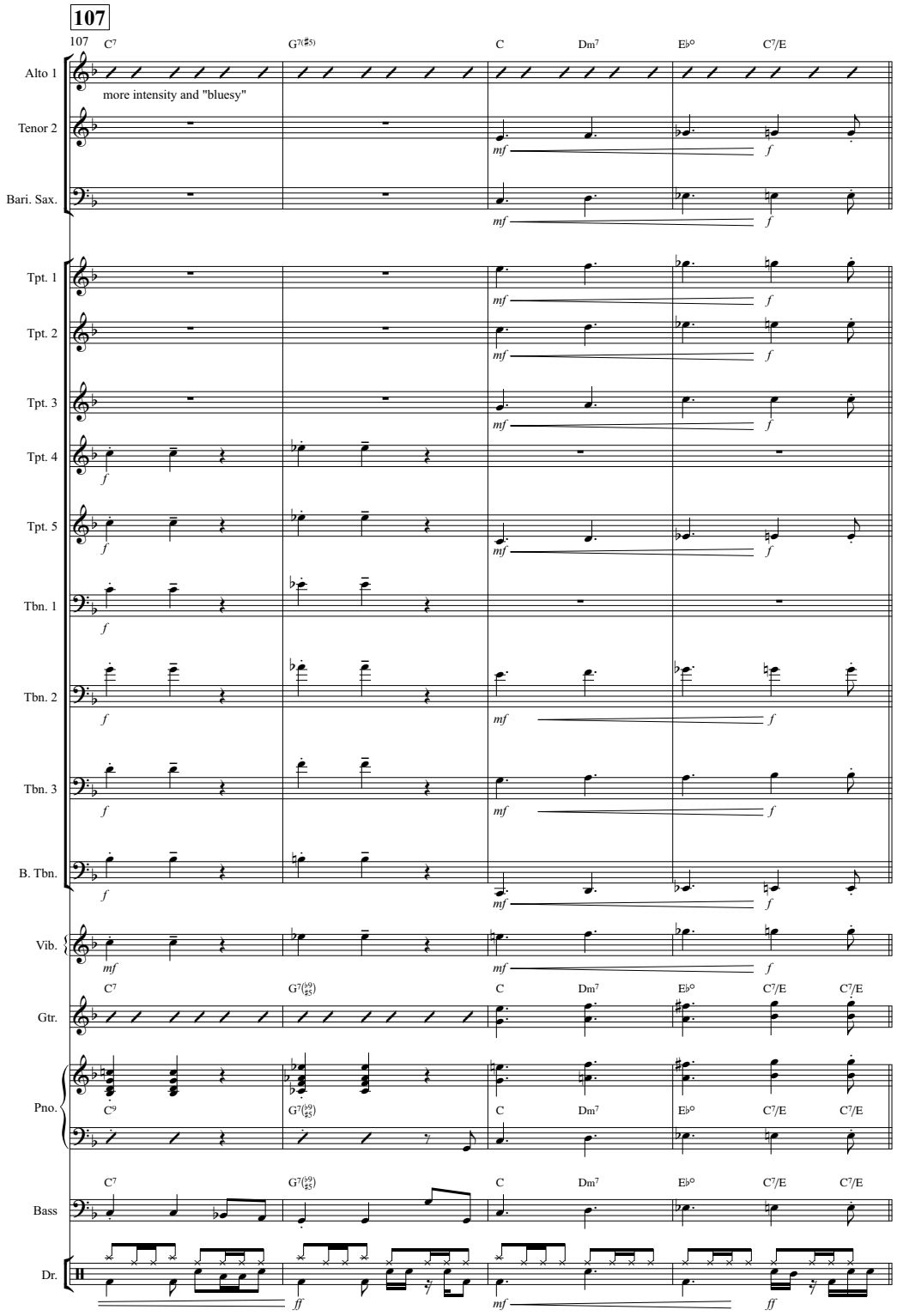

85
E2-85
Alto 1
pp
Alto 2
Tenor 1
pp
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
pp
Vib.
Gtr.
Pno.
F7(omit3)
B♭/F
F7(omit3)
B♭7/F
mp
Bass
8va
still quiet
Dr.

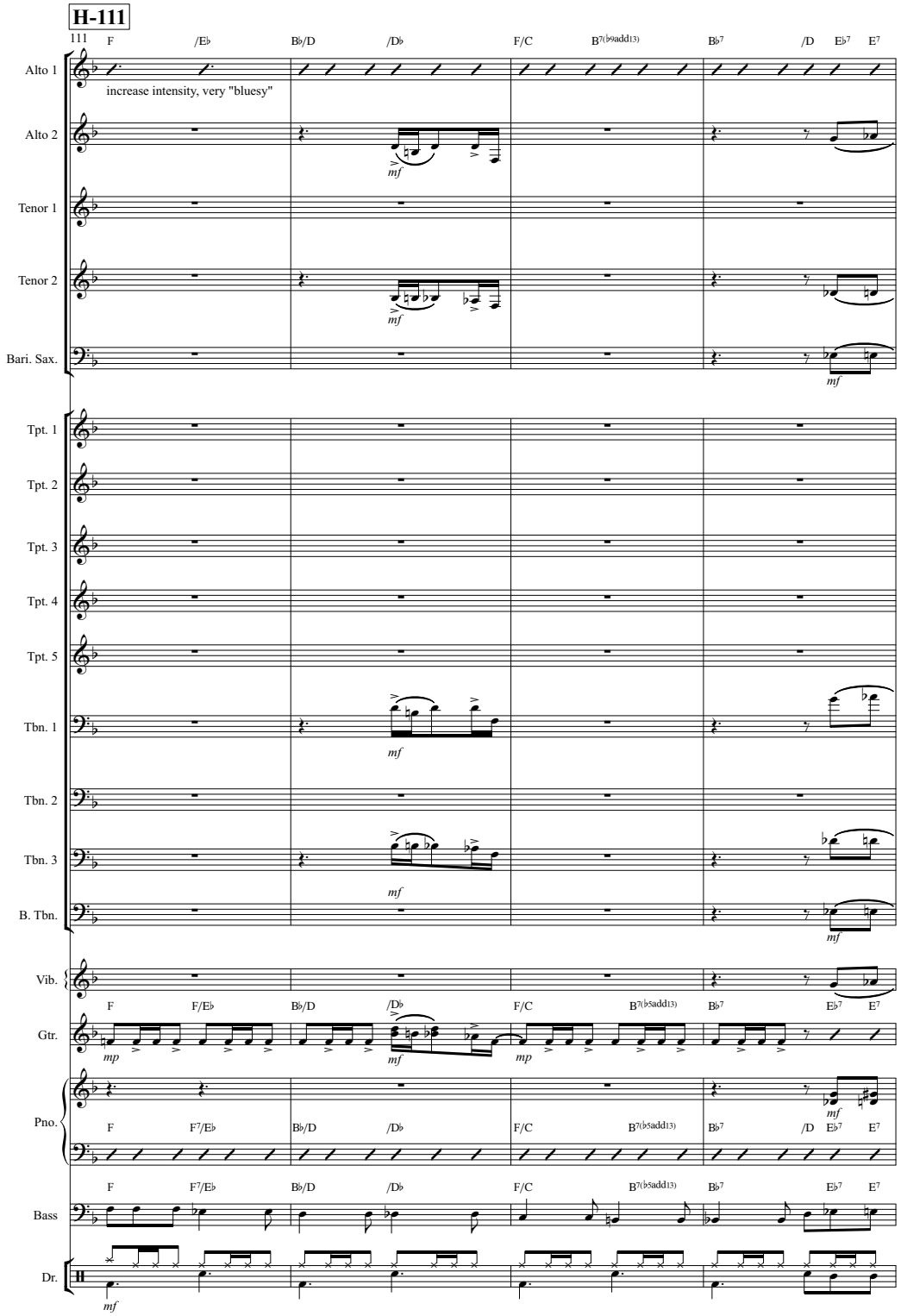

89
E2-89
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mp
mf
p
F7(omit3)
B♭7
A♭7(add13)
G7
/B
B♭/C
C7(♯5)
(8)
start to build...

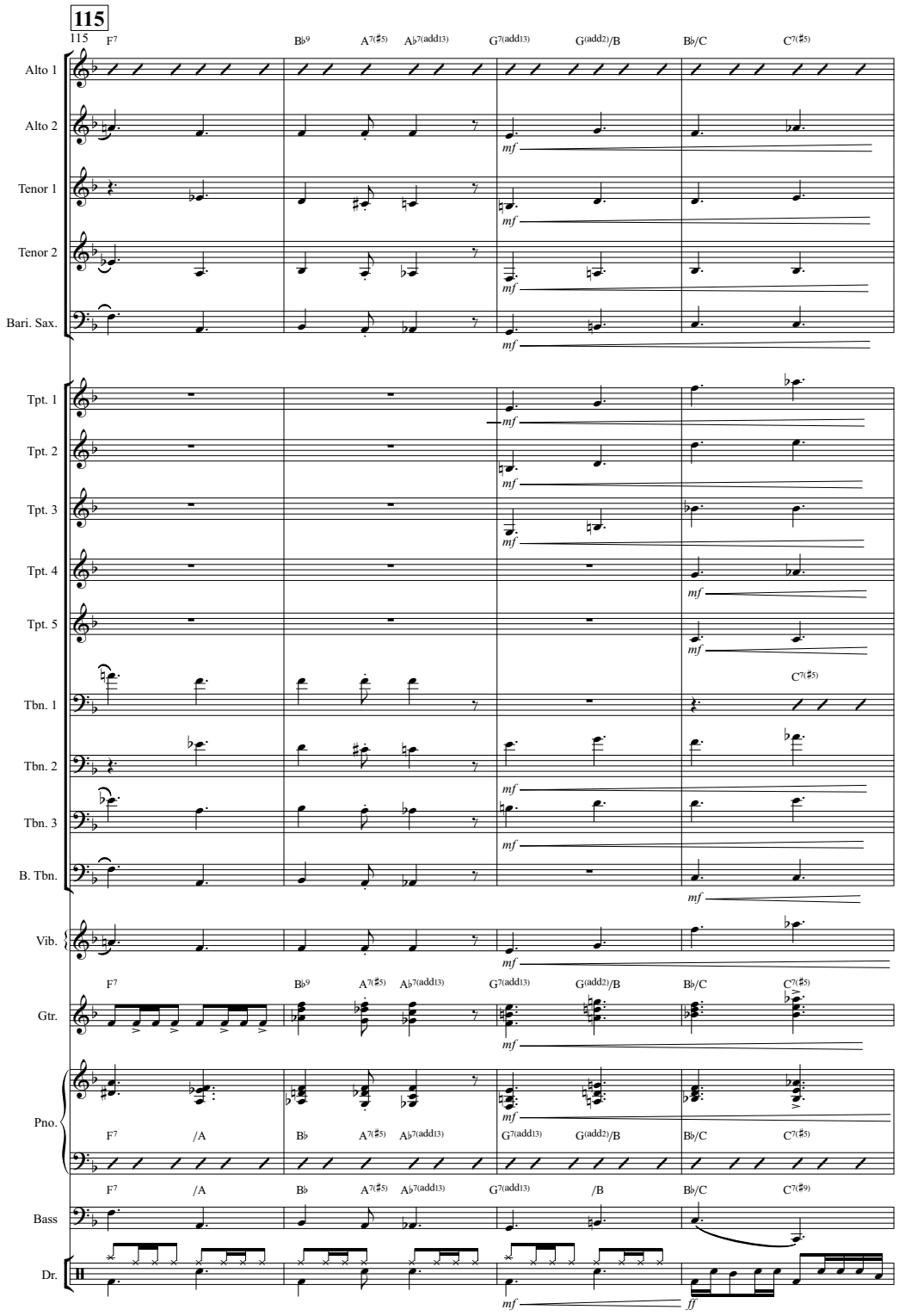

93
93
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F
B♭
F
F/A

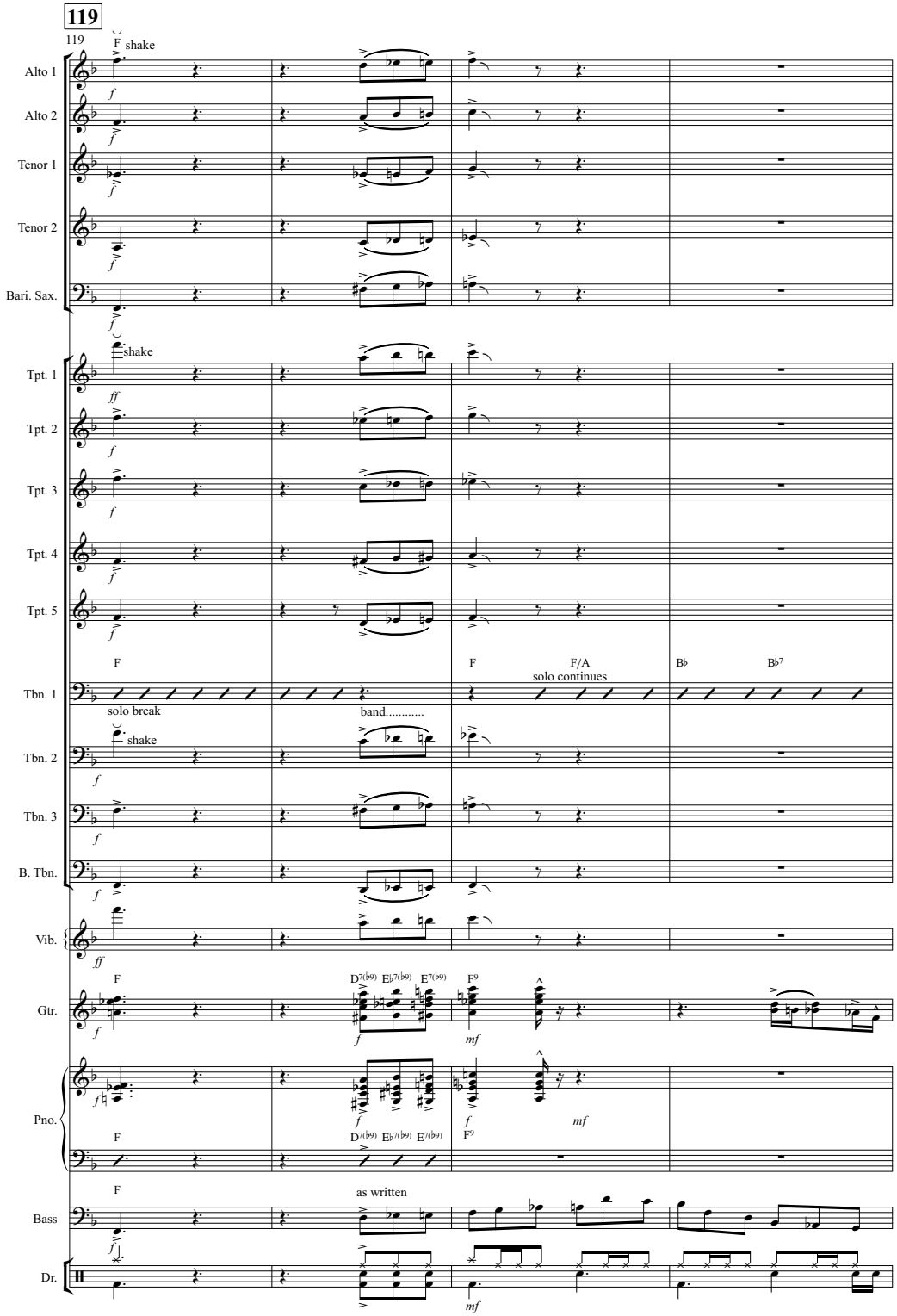

F-95
95
B♭maj7
D♭/E♭
F
Gm7
A♭°
F7/A
Alto 1
alto solo in a melodic manor
mute out
Tpt. 2
mute out
Tpt. 3
Vib.
pp
gentle
Gtr.
alto solo
Pno.
Bass
mf
alto solo
Dr.
mf
99
99
Alto 1
Vib.
Gtr.
Bass
Dr.

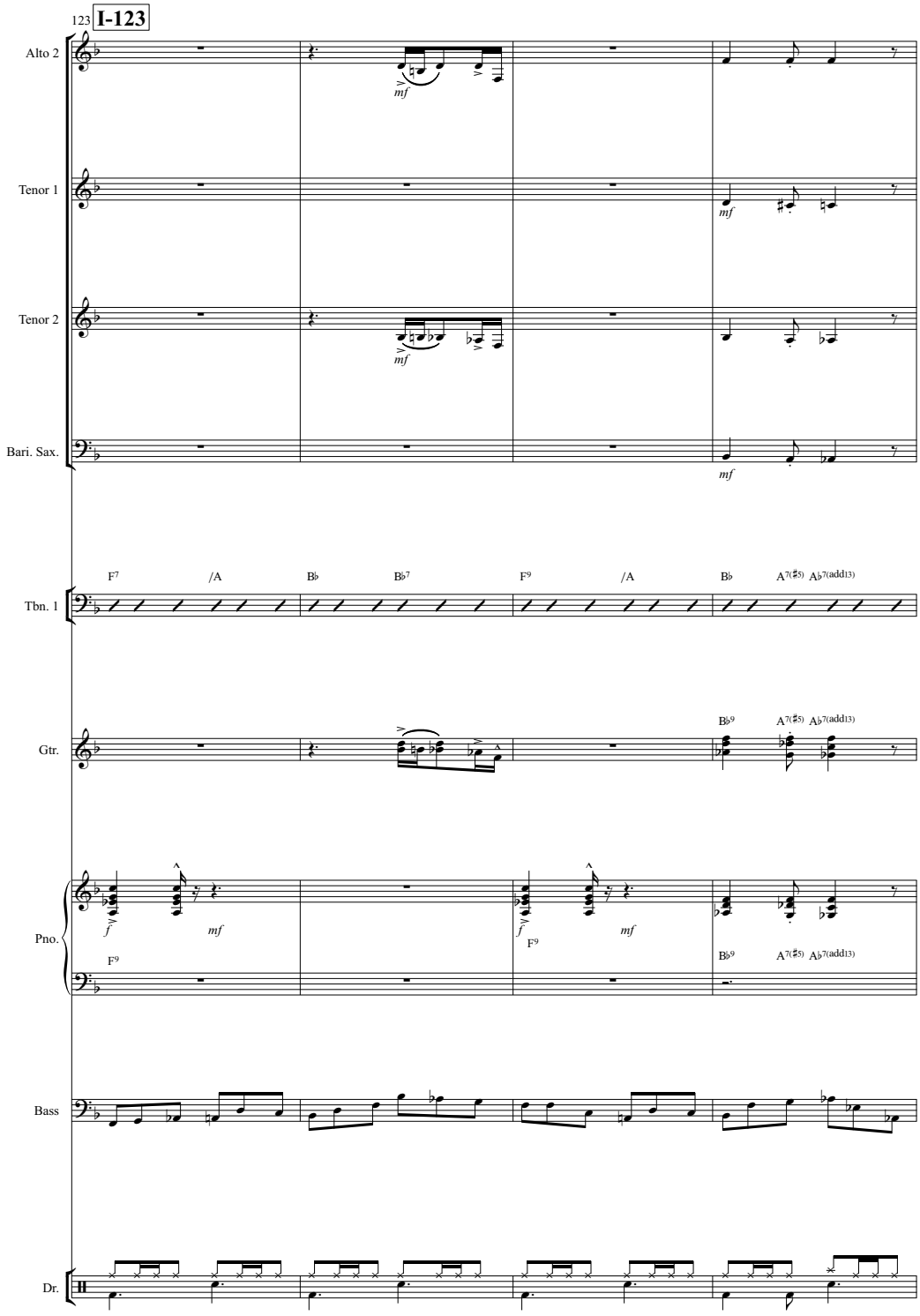

G-103
103
Alto 1
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
Bbmaj7
Gbmaj7/Ab
Fmaj7/G
/A
Bbo
G/B
E7(b9)/G#
Am7
G7/B
mp
mf
"greasy"
(b9)

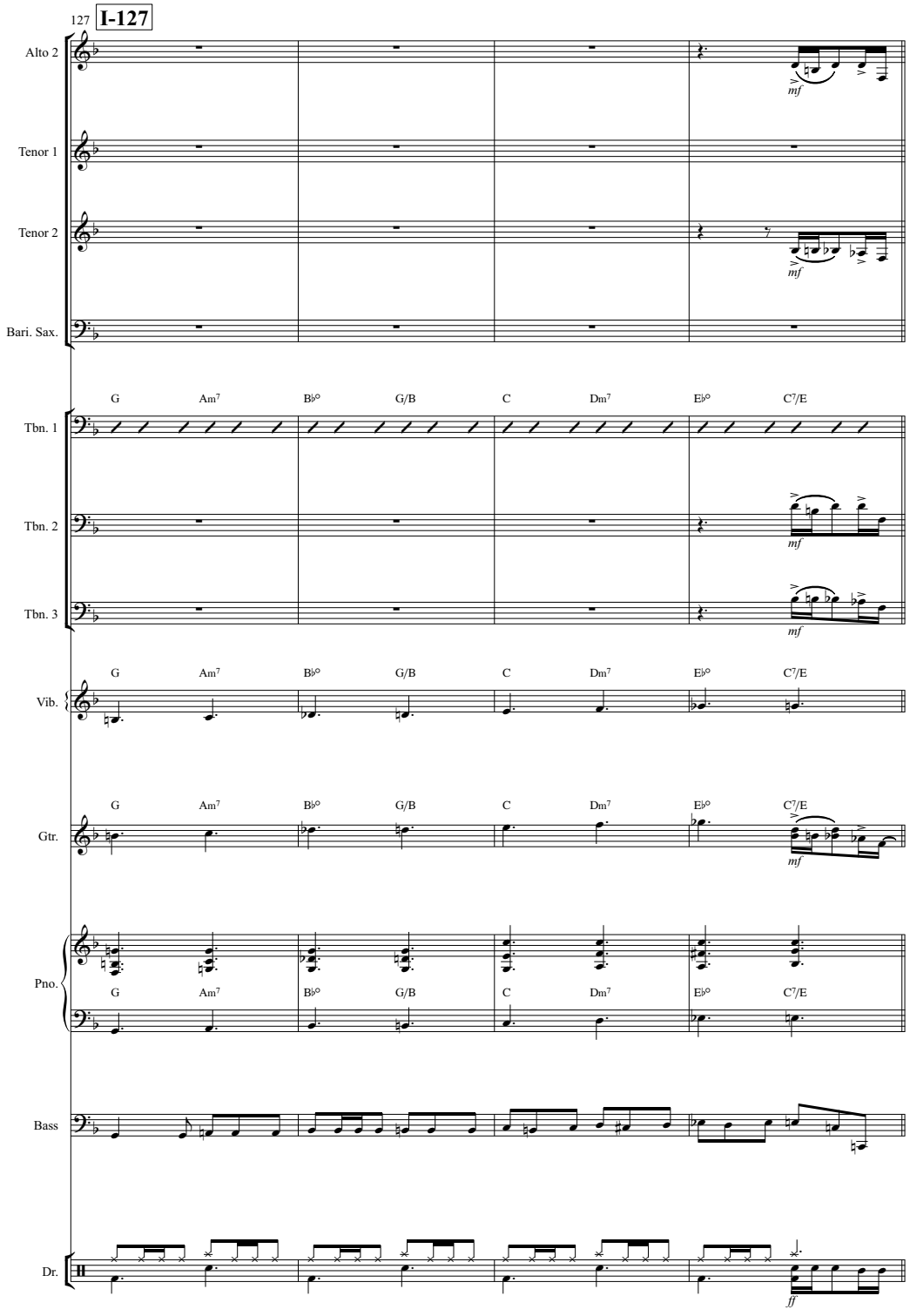

107
107
C7
G7(♯5)
C
Dm7
E♭°
C7/E
Alto 1
more intensity and "bluesy"
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
C7
G7(♭9 ♯5)
C
Dm7
E♭°
C7/E
C7/E
Gtr.
Pno.
C9
G7(♭9 ♯5)
C
Dm7
E♭°
C7/E
C7/E
C7
G7(♭9 ♯5)
C
Dm7
E♭°
C7/E
C7/E
Bass
Dr.

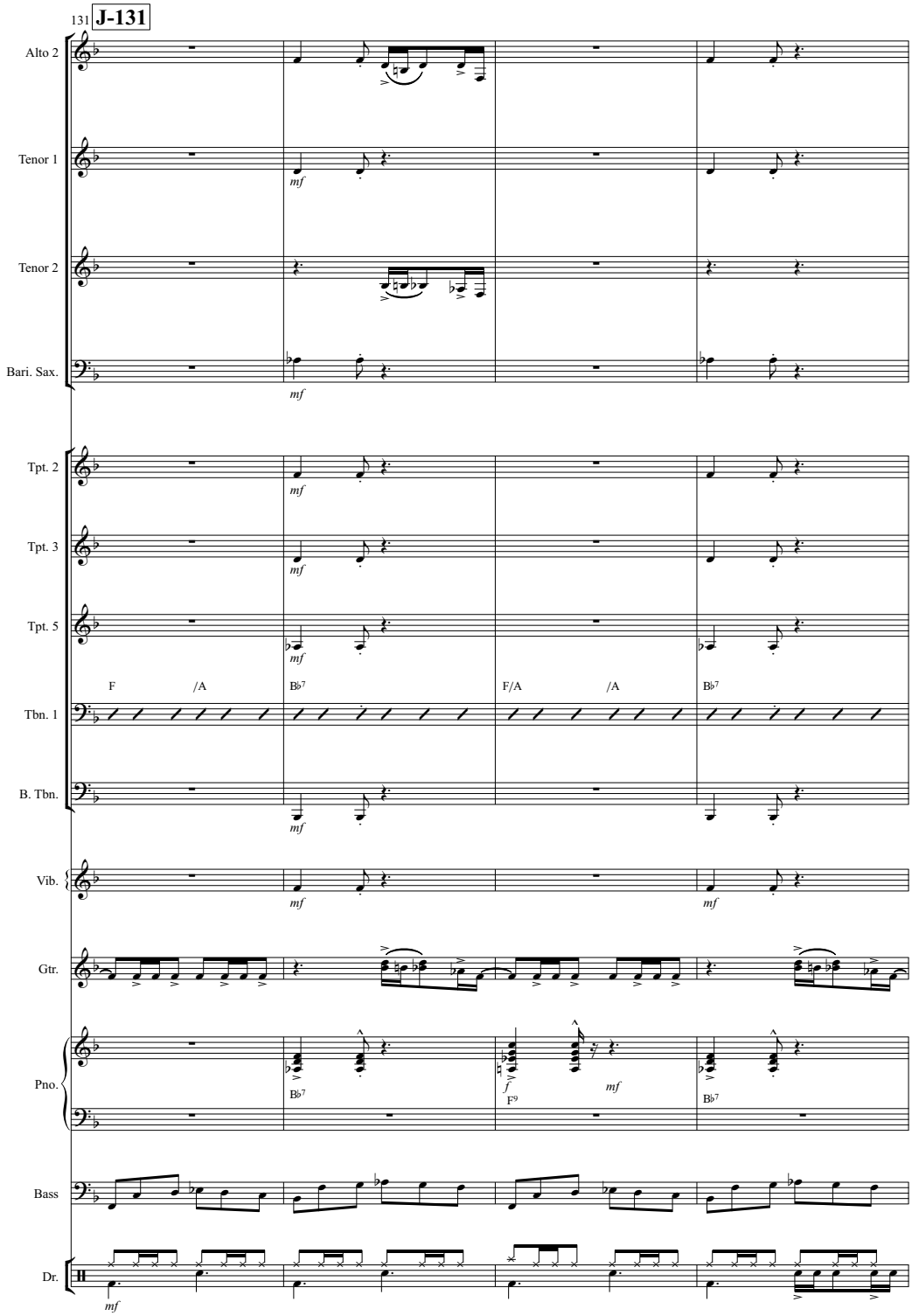

H-111
111
F
/E♭
B♭/D
/D♭
F/C
B7(♭9add13)
B♭7
/D
E♭7
E7
Alto 1
increase intensity, very "bluesy"
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
mf
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
F
F/E♭
B♭/D
/D♭
F/C
B7(♭5add13)
B♭7
E♭7
E7
Gtr.
mp
mf
mp
Pno.
F
F7/E♭
B♭/D
/D♭
F/C
B7(♭5add13)
B♭7
/D
E♭7
E7
Bass
Dr.

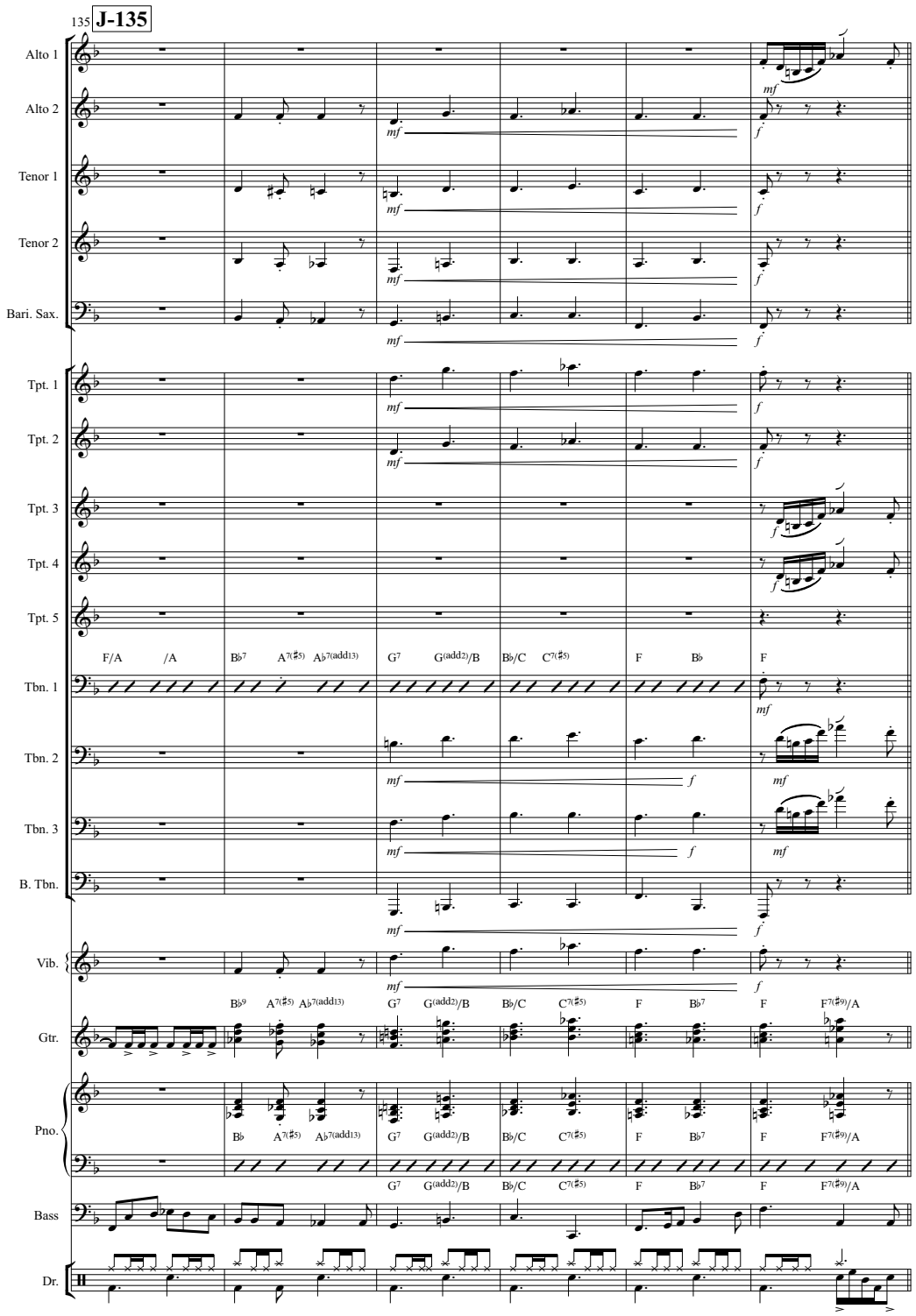

115
115
F7
B♭9
A7(♯5)
A♭7(add13)
G7(add13)
G(add2)/B
B♭/C
C7(♯5)
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
/A
/B
C7(♯9)
mf
ff

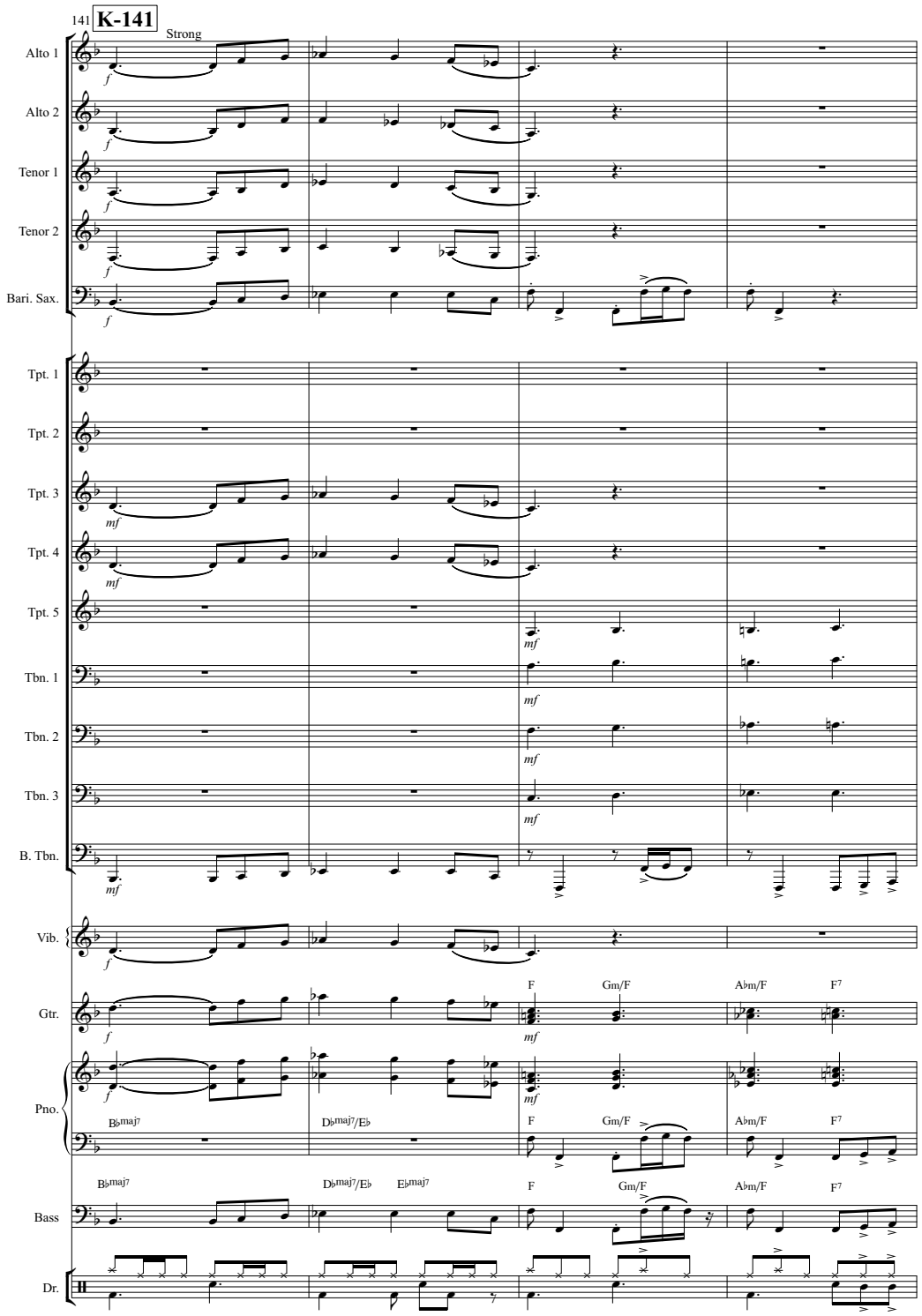

119
119
F shake
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
shake
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
F
F
F/A
solo continues
B♭
B♭7
Tbn. 1
solo break
band.....
shake
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
F
D7(♭9) E♭7(♭9) E7(♭9)
F9
Gtr.
Pno.
F
D7(♭9) E♭7(♭9) E7(♭9)
F9
F
as written
Bass
Dr.

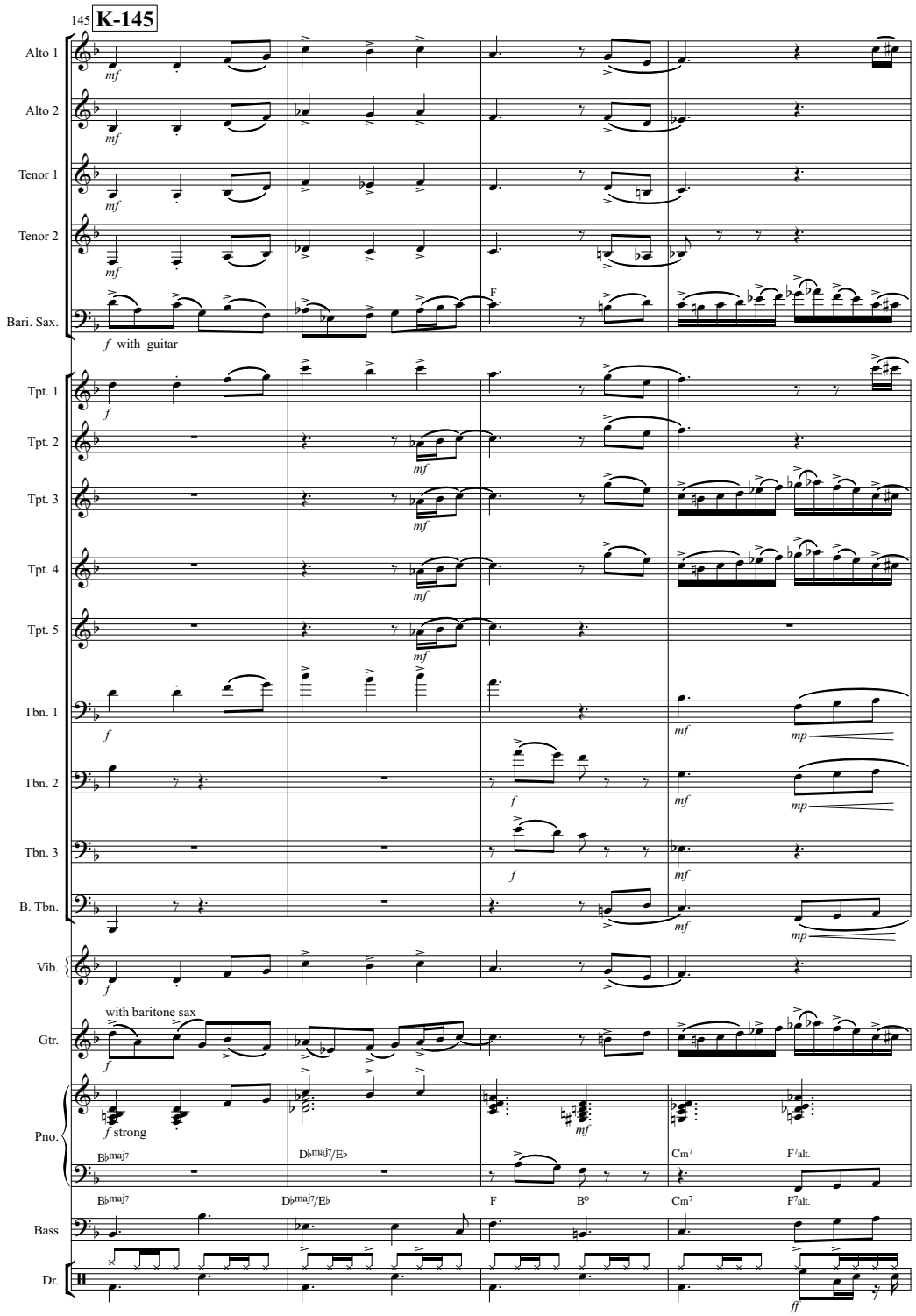

123
I-123
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tbn. 1
Gtr.
Pno.
Bass
Dr.
mf
F7
/A
B♭
B♭7
F9
B♭9
A7(♯5)
A♭7(add13)

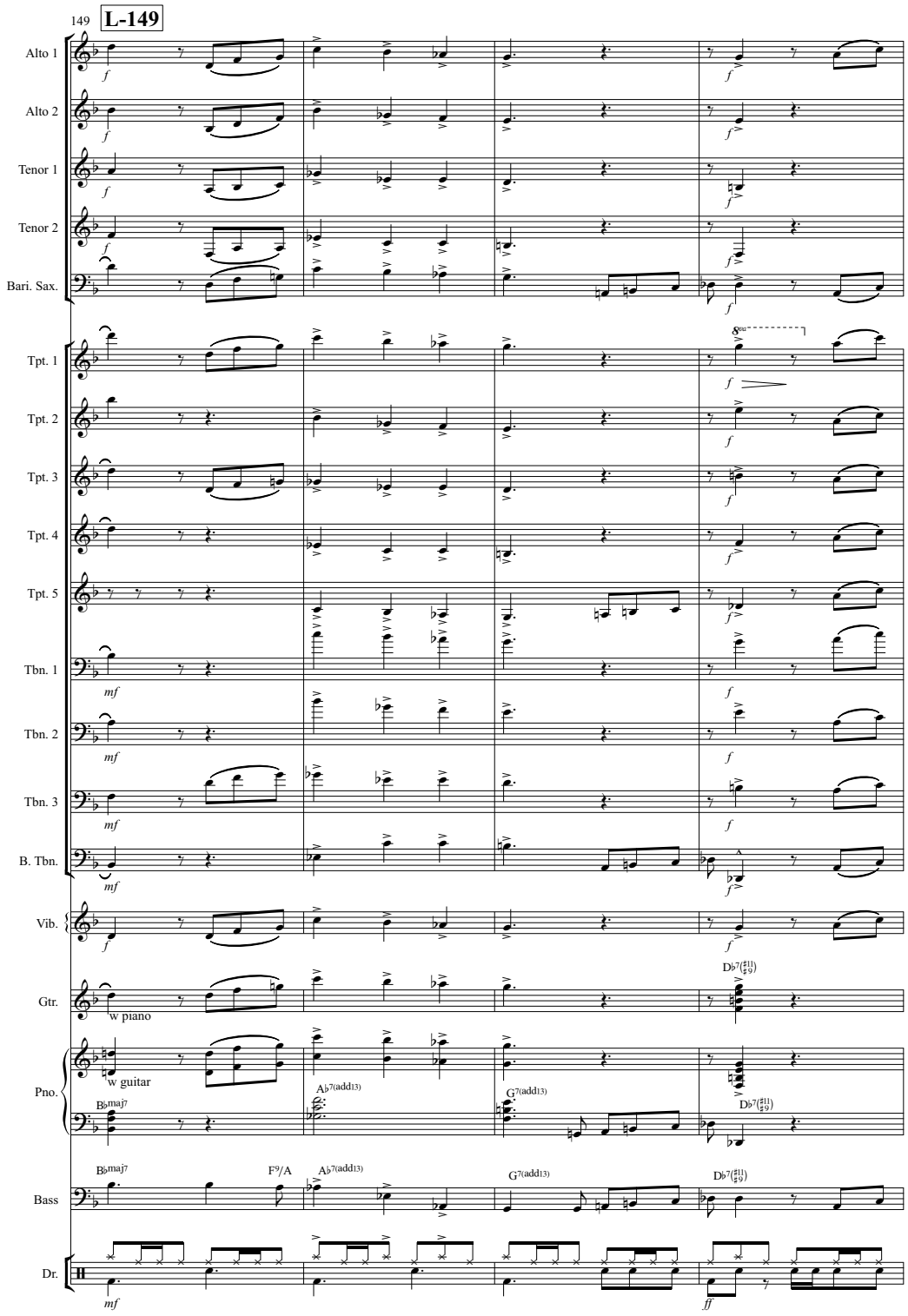

127
I-127
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tbn. 1
Tbn. 2
Tbn. 3
Vib.
Gtr.
Pno.
Bass
Dr.
G Am7 B♭° G/B C Dm7 E♭° C7/E
mf
ff

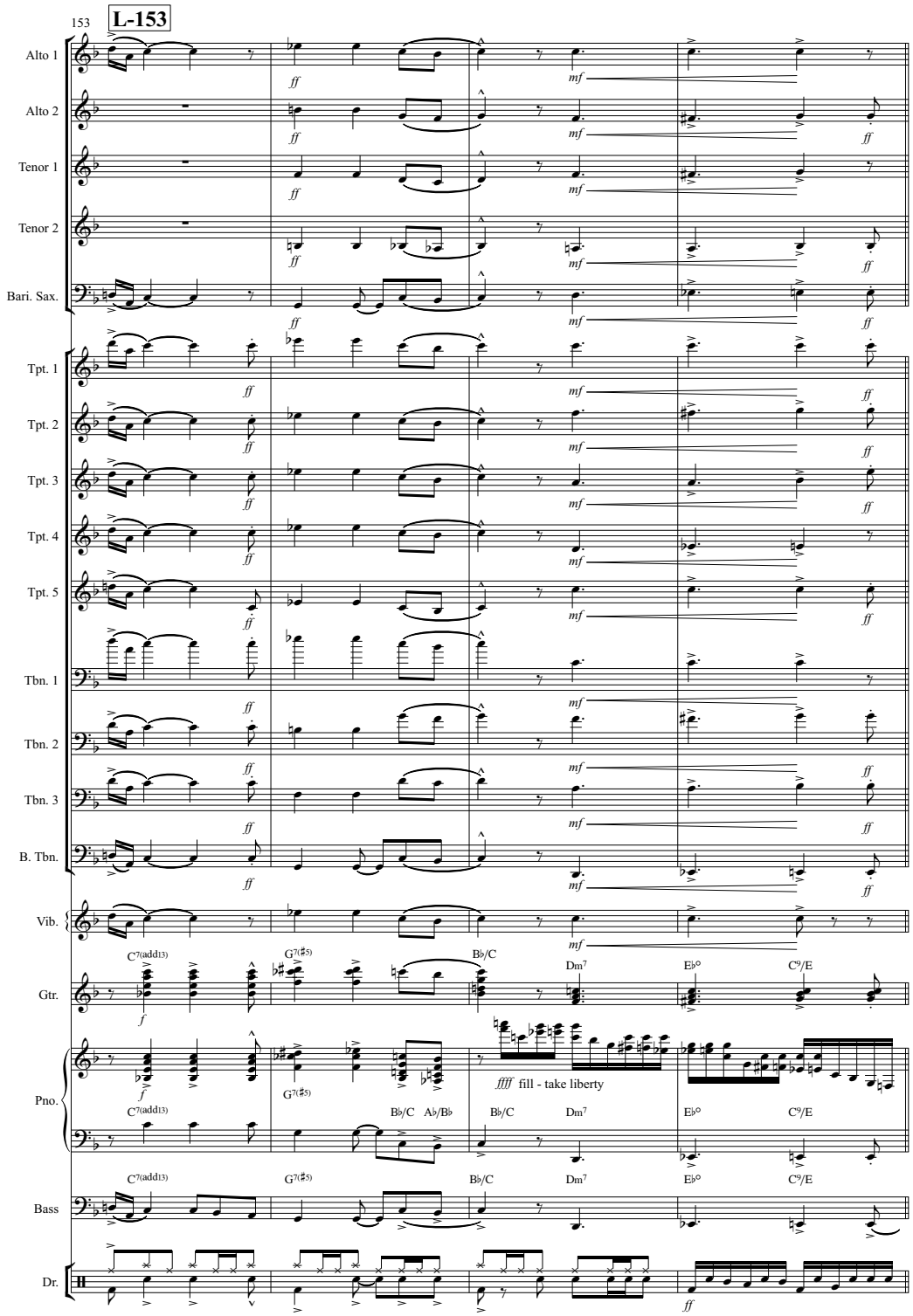

131
J-131
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 2
Tpt. 3
Tpt. 5
Tbn. 1
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
F
/A
B♭7
F/A
/A
B♭7
f
F9
mf
B♭7

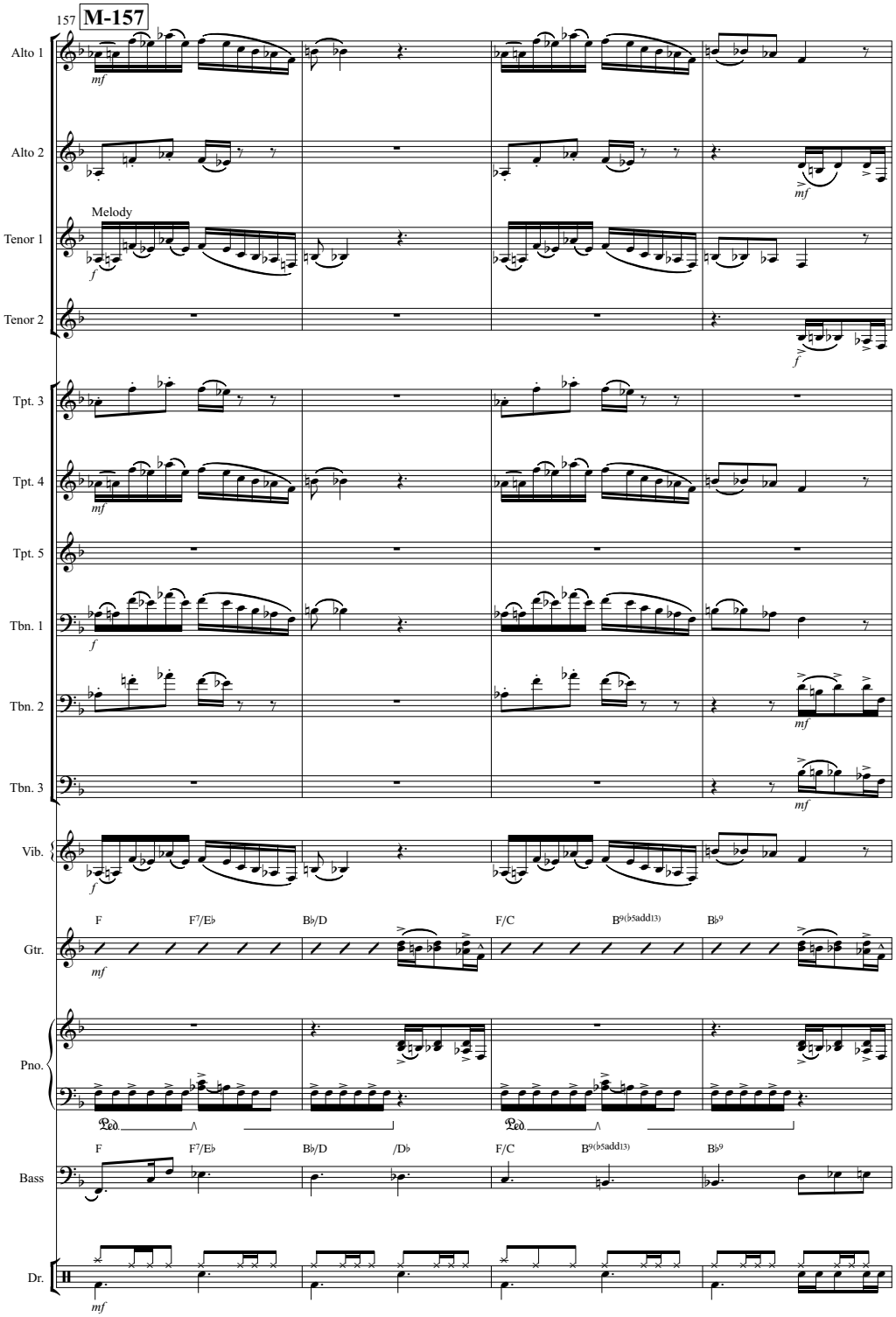

135
J-135
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
F/A /A B♭7 A7(♯5) A♭7(add13) G7 G(add2)/B B♭/C C7(♯5) F B♭ F
B♭9 A7(♯5) A♭7(add13) G7 G(add2)/B B♭/C C7(♯5) F B♭7 F F7(♯9)/A
B♭ A7(♯5) A♭7(add13) G7 G(add2)/B B♭/C C7(♯5) F B♭7 F F7(♯9)/A
G7 G(add2)/B B♭/C C7(♯5) F B♭7 F F7(♯9)/A

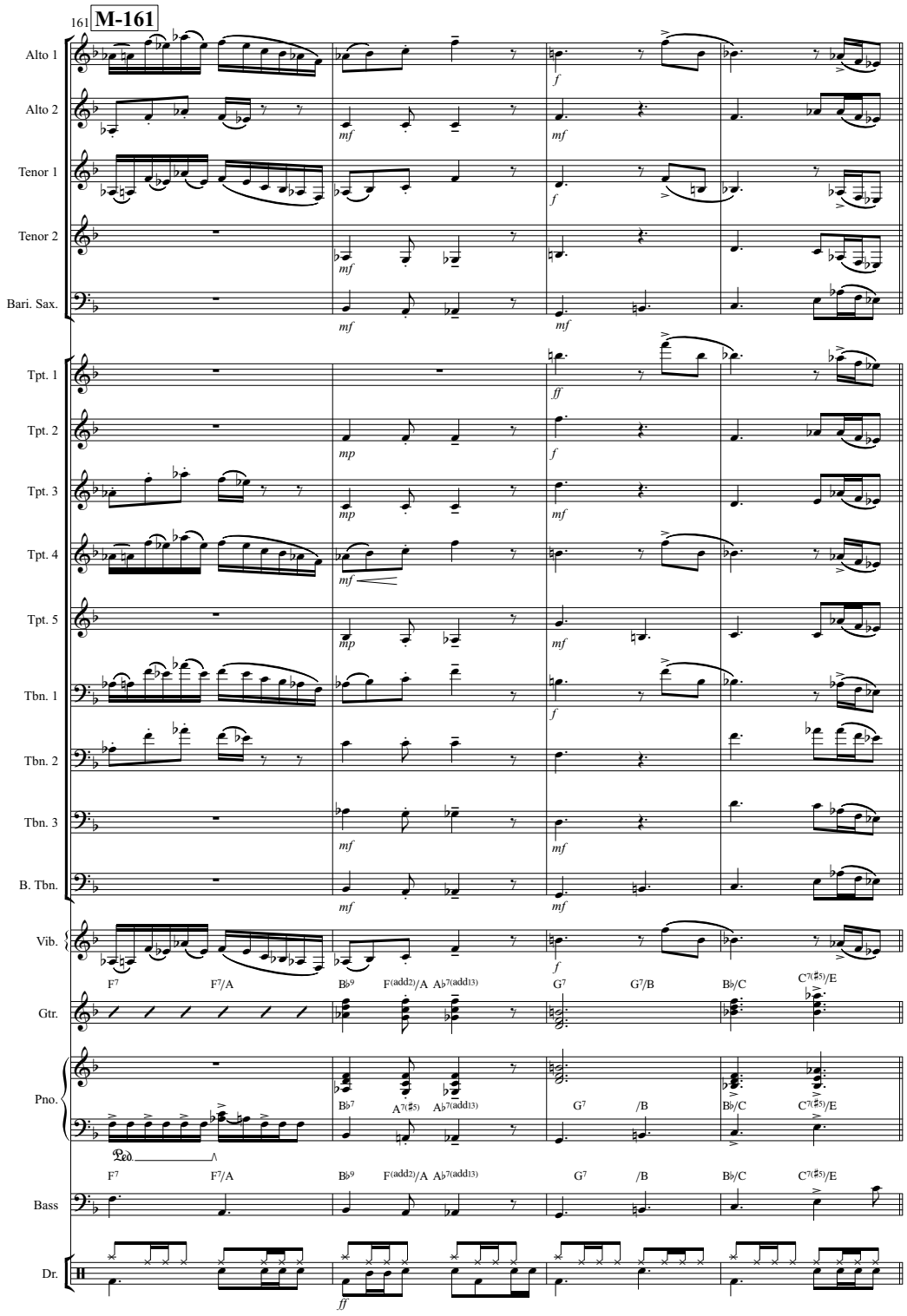

141
K-141
Strong
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F
Gm/F
A♭m/F
F7
B♭maj7
D♭maj7/E♭
E♭maj7

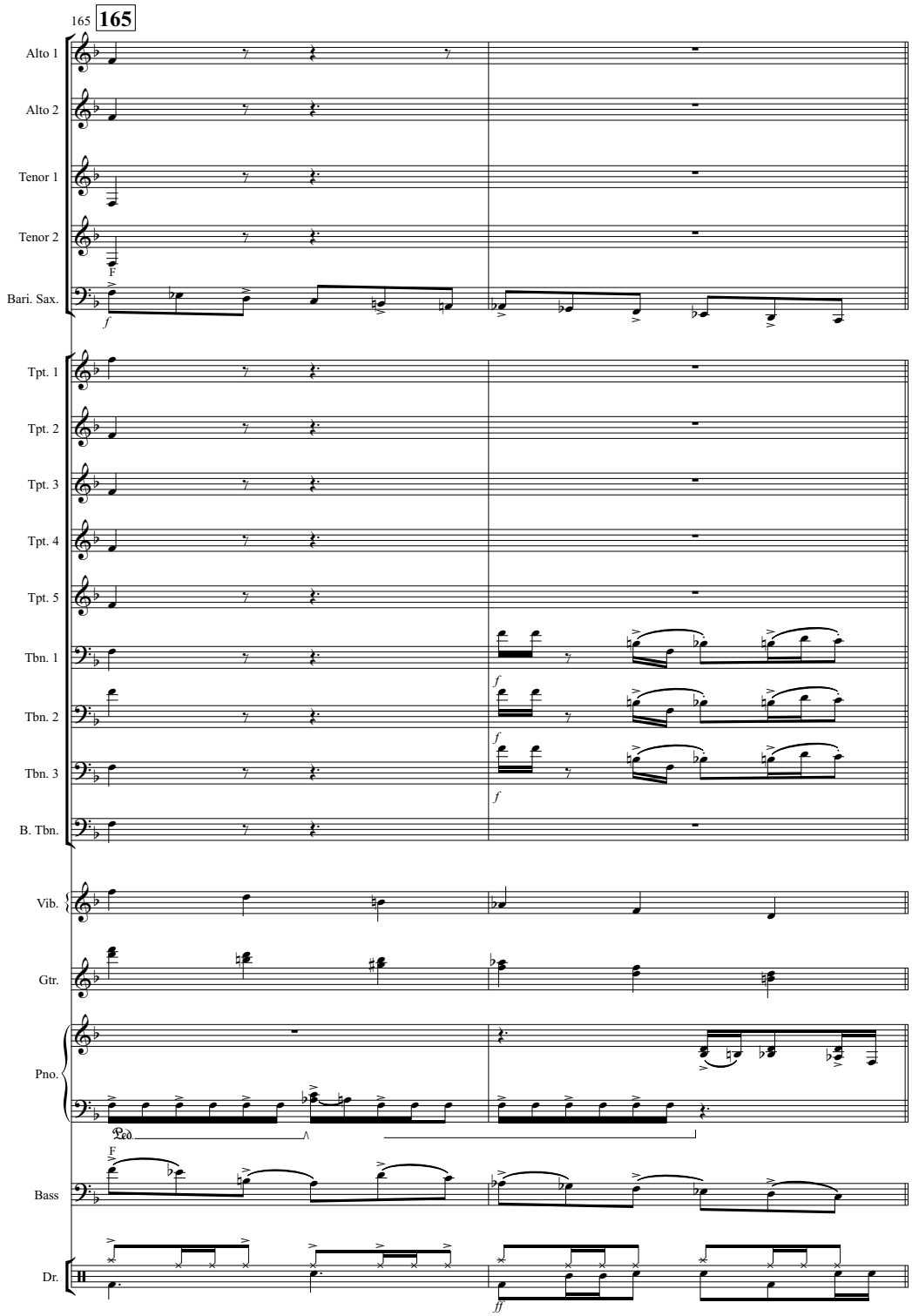

145
K-145
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
mf
f with guitar
F
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
f
mf
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
mp
Vib.
with baritone sax
Gtr.
Pno.
f strong
B♭maj7
D♭maj7/E♭
Cm7
F7alt.
F
B°
Bass
Dr.
ff

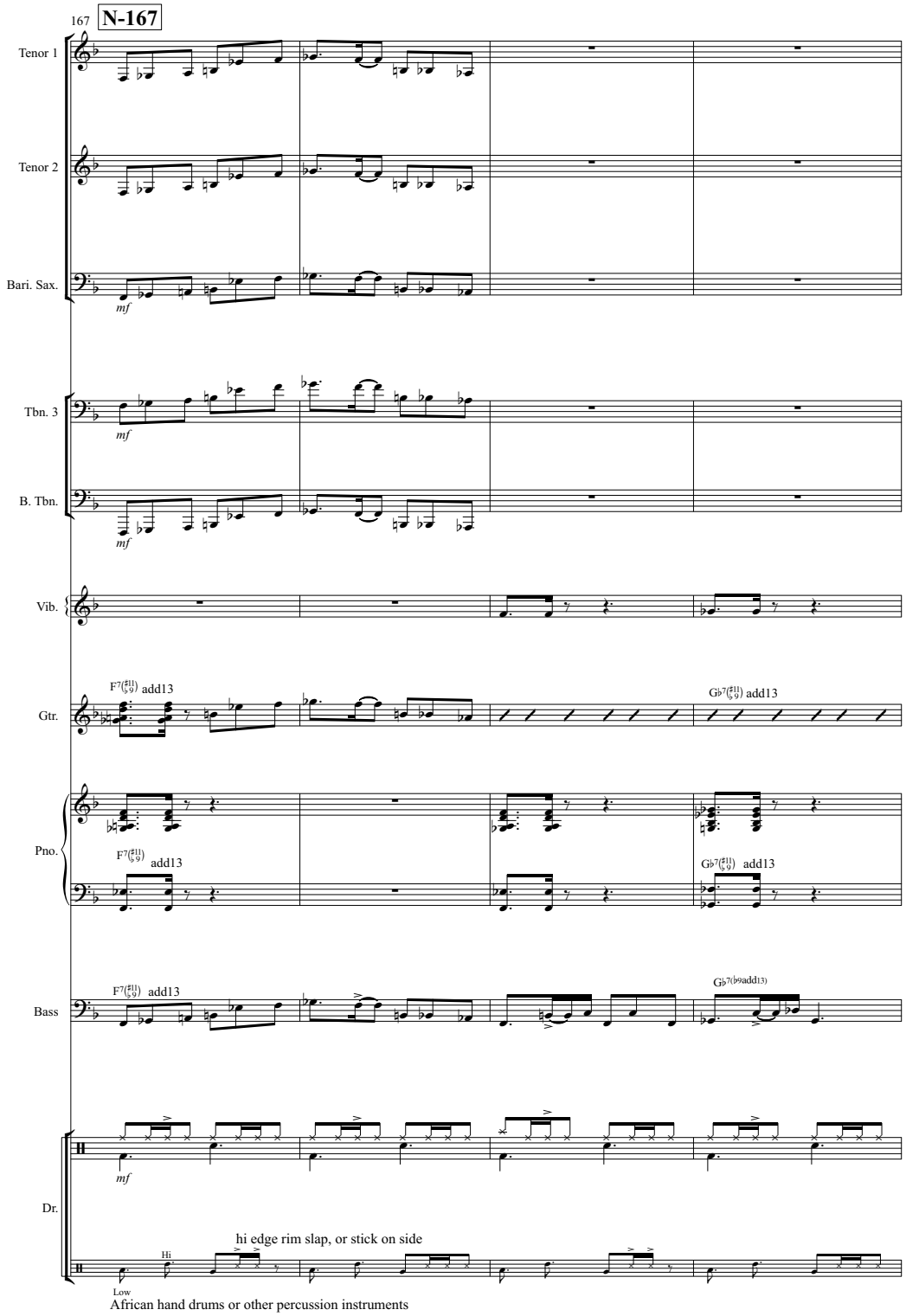

149
L-149
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
w piano
Pno.
w guitar
Bass
Dr.
B♭maj7
F9/A
A♭7(add13)
G7(add13)
D♭7(♯11/♯9)

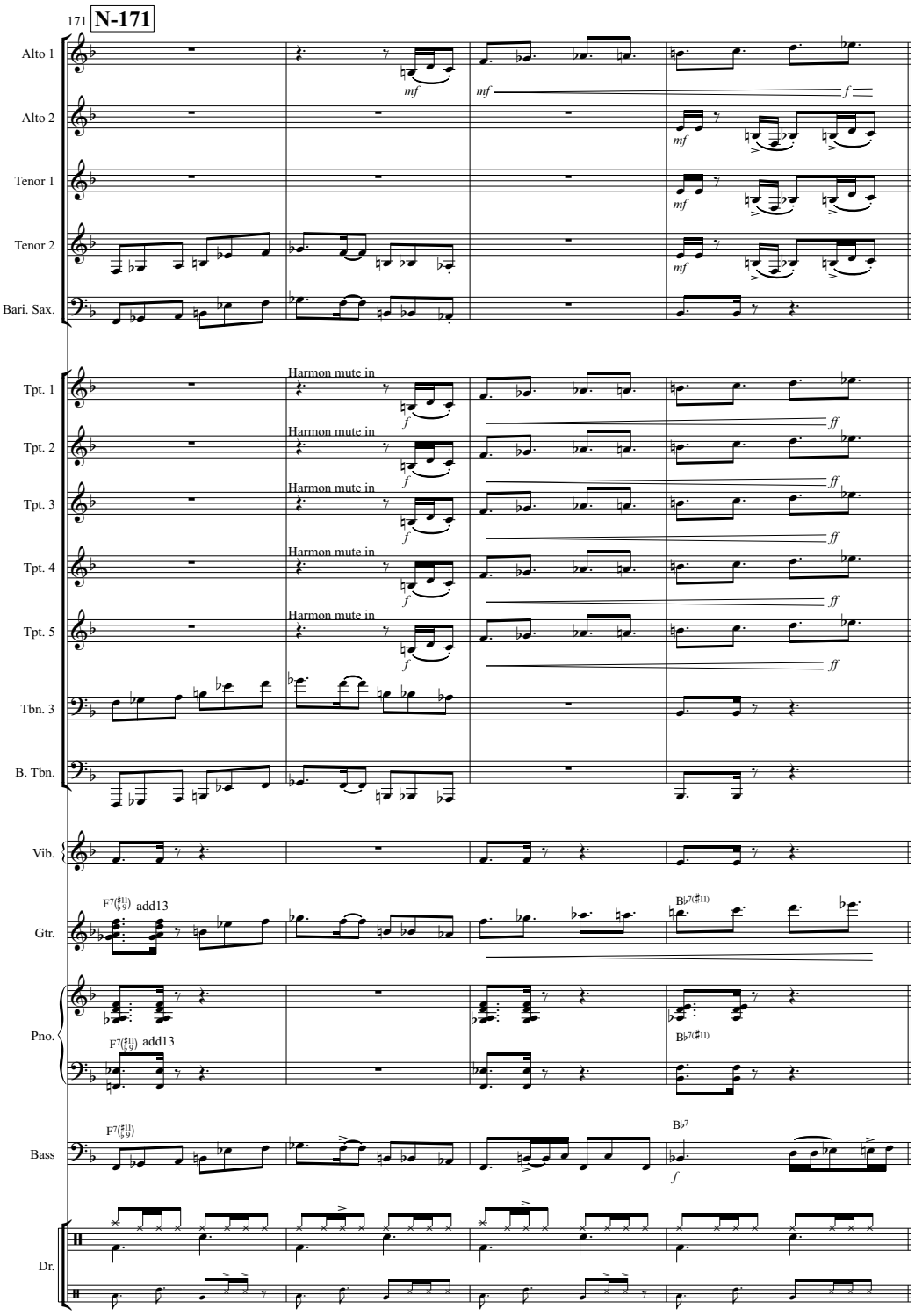

153
L-153
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
C7(add13)
G7(♯5)
B♭/C
Dm7
E♭°
C9/E
A♭/B♭
ffff fill - take liberty

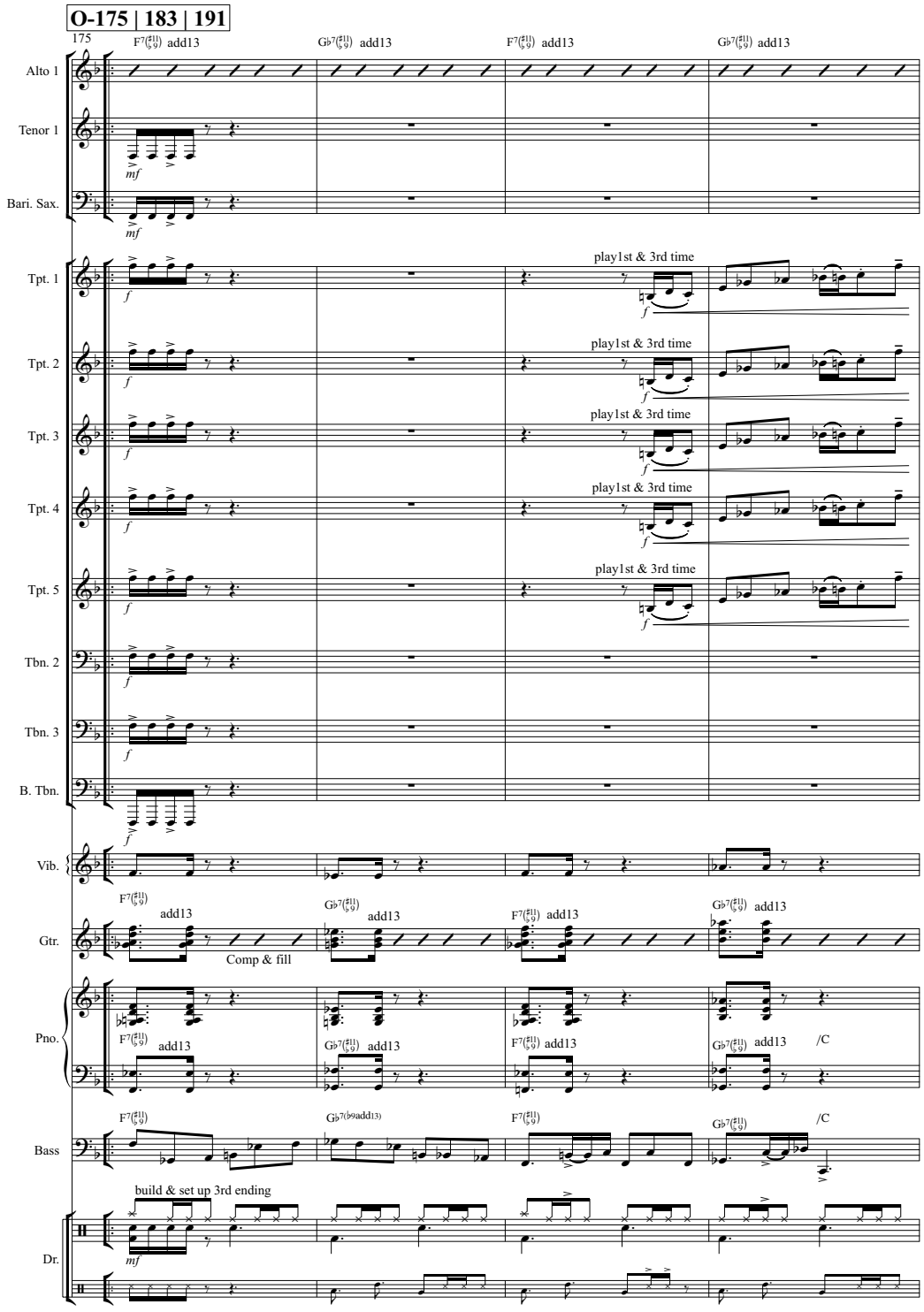

157
M-157
Alto 1
Alto 2
Melody
Tenor 1
Tenor 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
F
F7/E♭
B♭/D
F/C
B9(♭5add13)
B♭9
/D♭

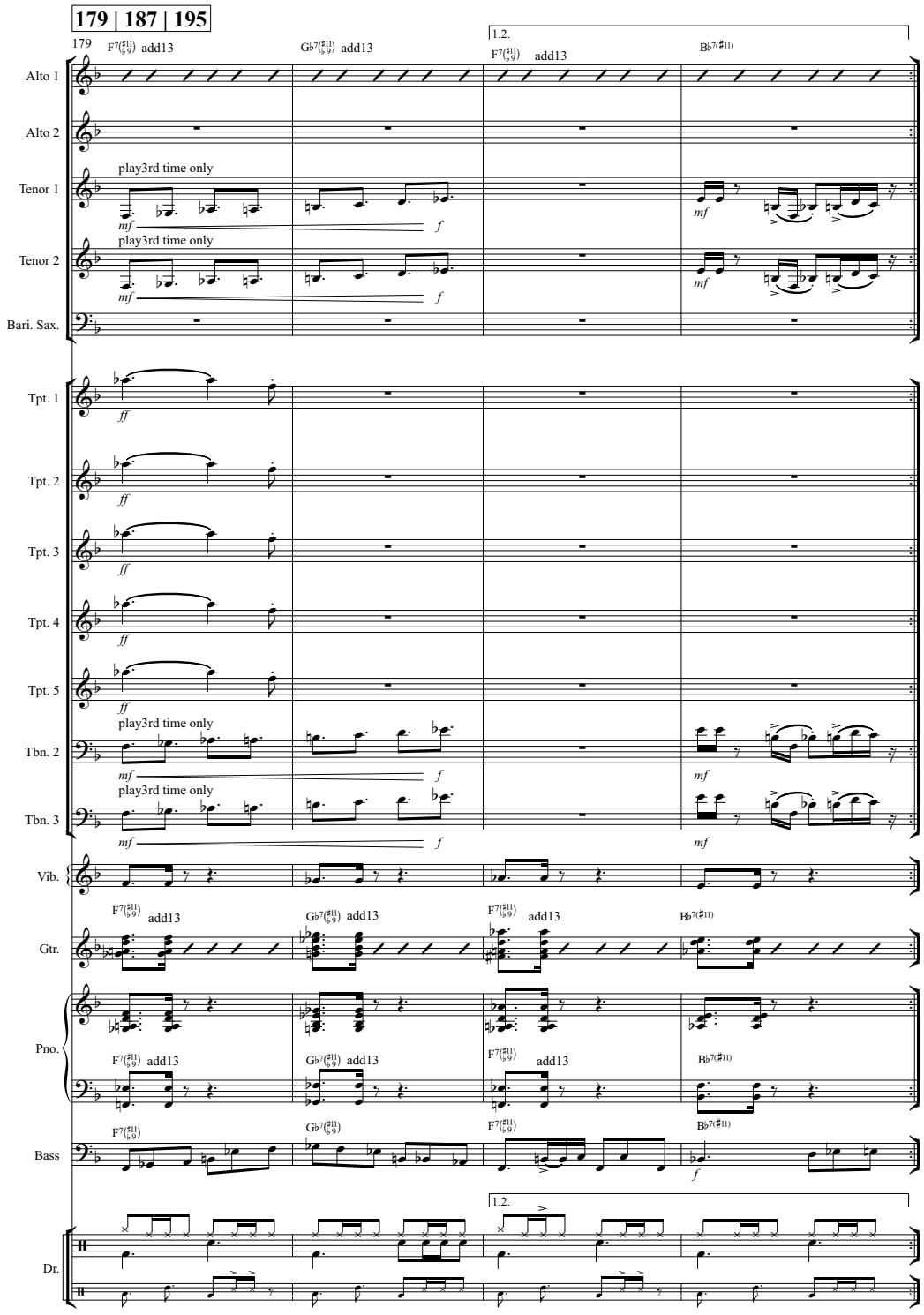

161
M-161
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F7 F7/A B♭9 F(add2)/A A♭7(add13) G7 G7/B B♭/C C7(♯5)/E
B♭7 A7(♯5) A♭7(add13) G7 /B B♭/C C7(♯5)/E
Ped.
F7 F7/A B♭9 F(add2)/A A♭7(add13) G7 /B B♭/C C7(♯5)/E

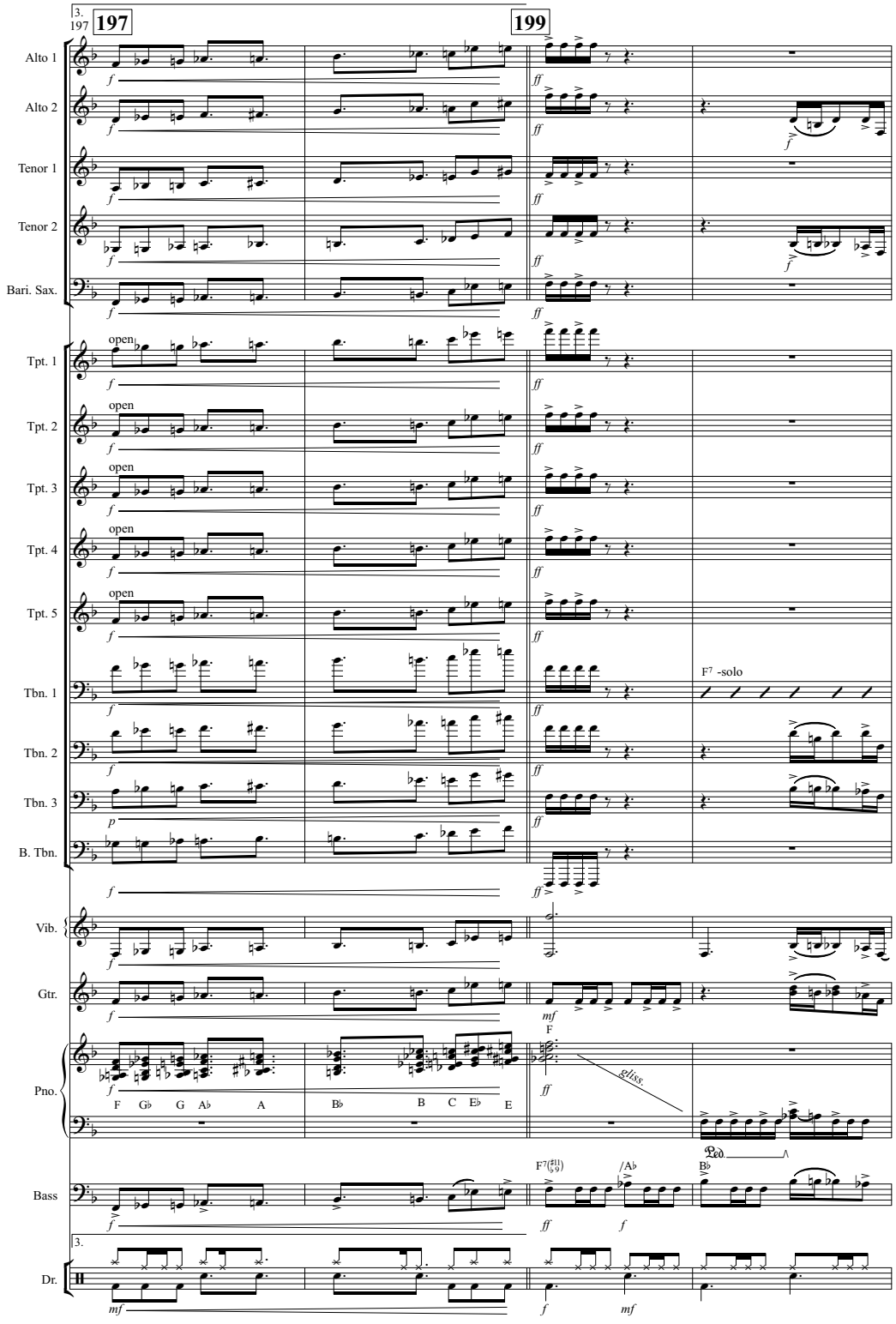

165
165
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
F
f
ff

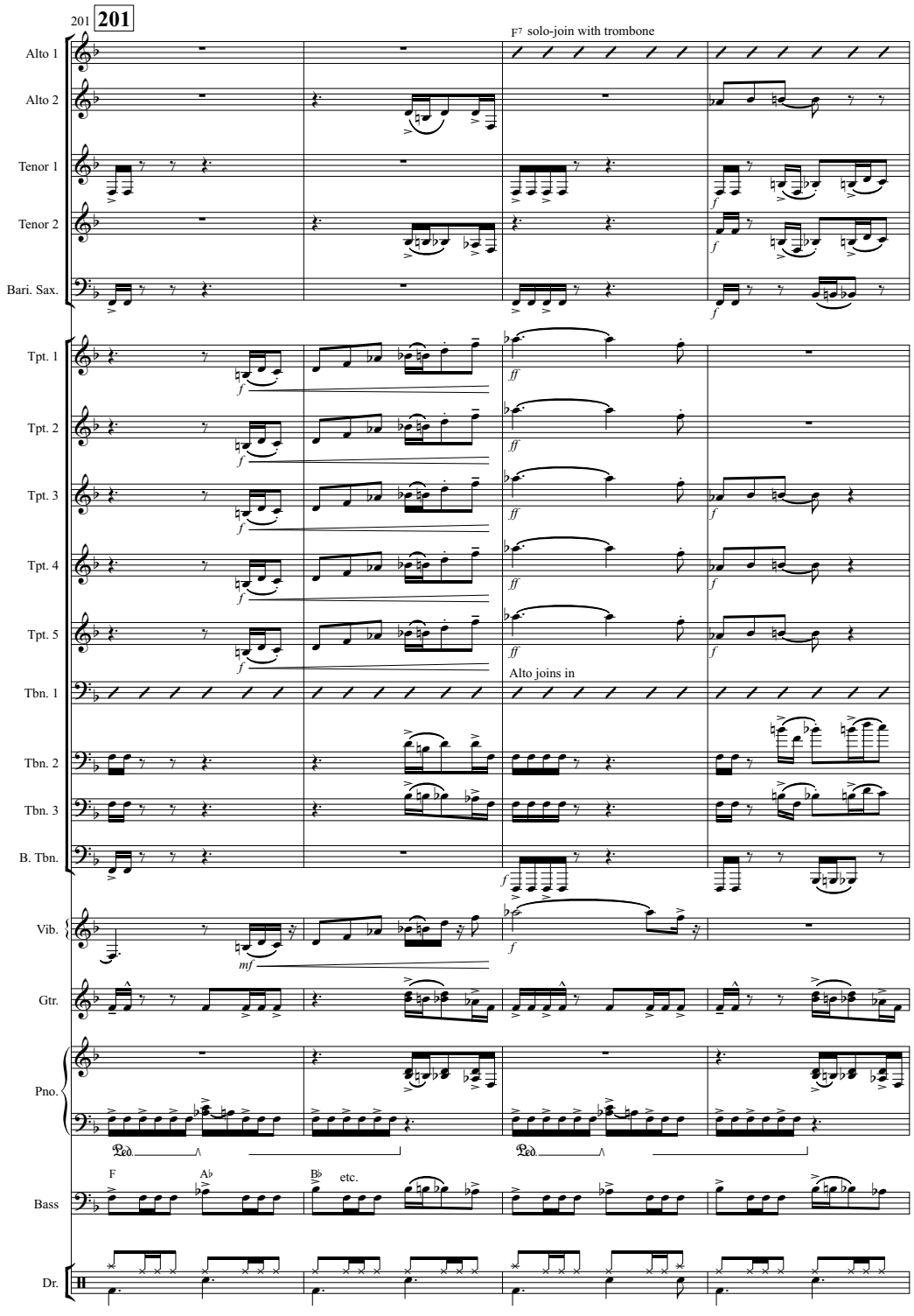

167
N-167
Tenor 1
Tenor 2
Bari. Sax.
mf
Tbn. 3
mf
B. Tbn.
mf
Vib.
Gtr.
F7(♯11)(♭9) add13
G♭7(♯11)(♭9) add13
Pno.
F7(♯11)(♭9) add13
G♭7(♯11)(♭9) add13
Bass
F7(♯11)(♭9) add13
G♭7(♭9add13)
Dr.
mf
hi edge rim slap, or stick on side
Hi
Low
African hand drums or other percussion instruments

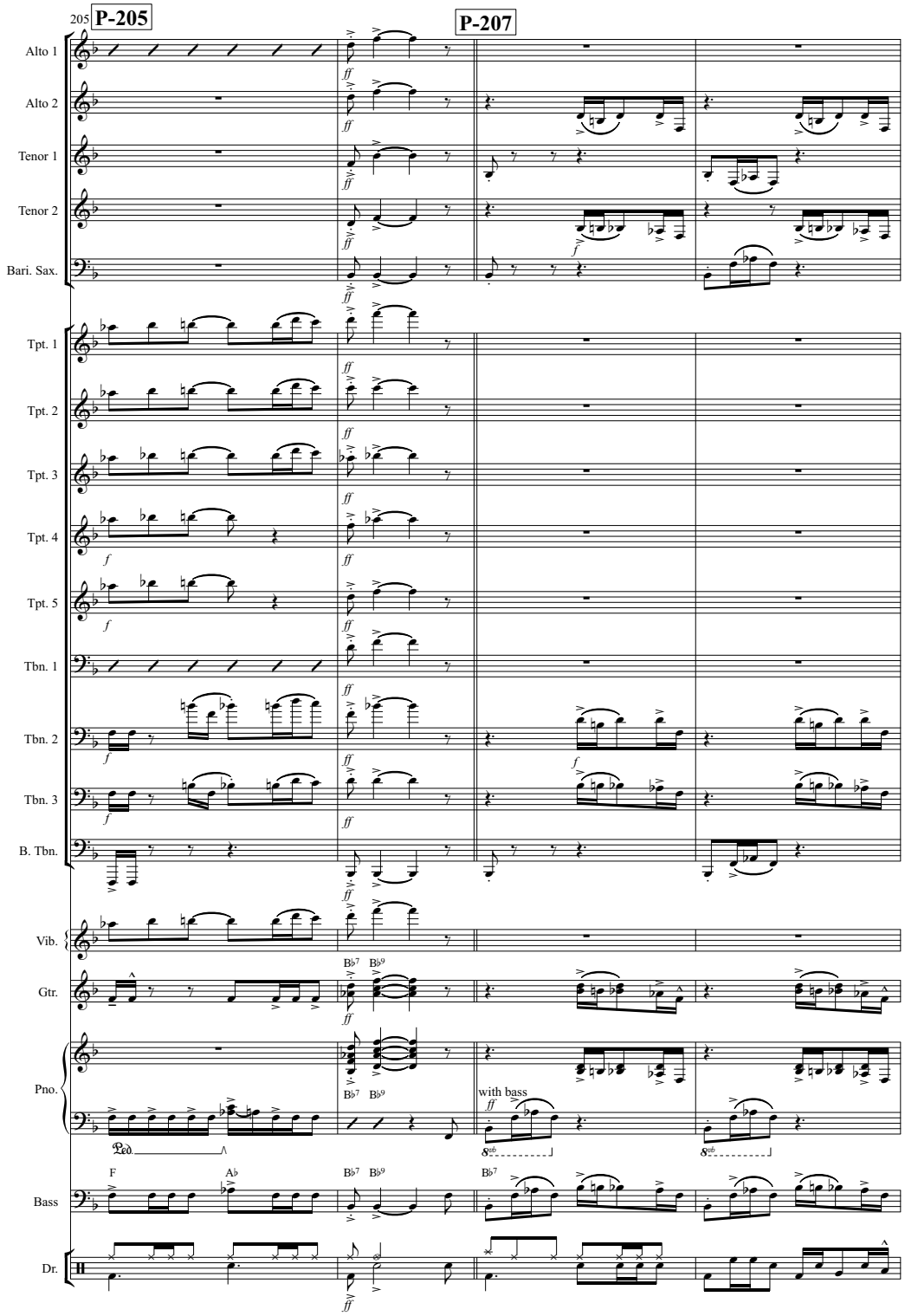

171
N-171
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Harmon mute in
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
mf
f
ff
F7(♯11) add13
B♭7(♯11)
B♭7

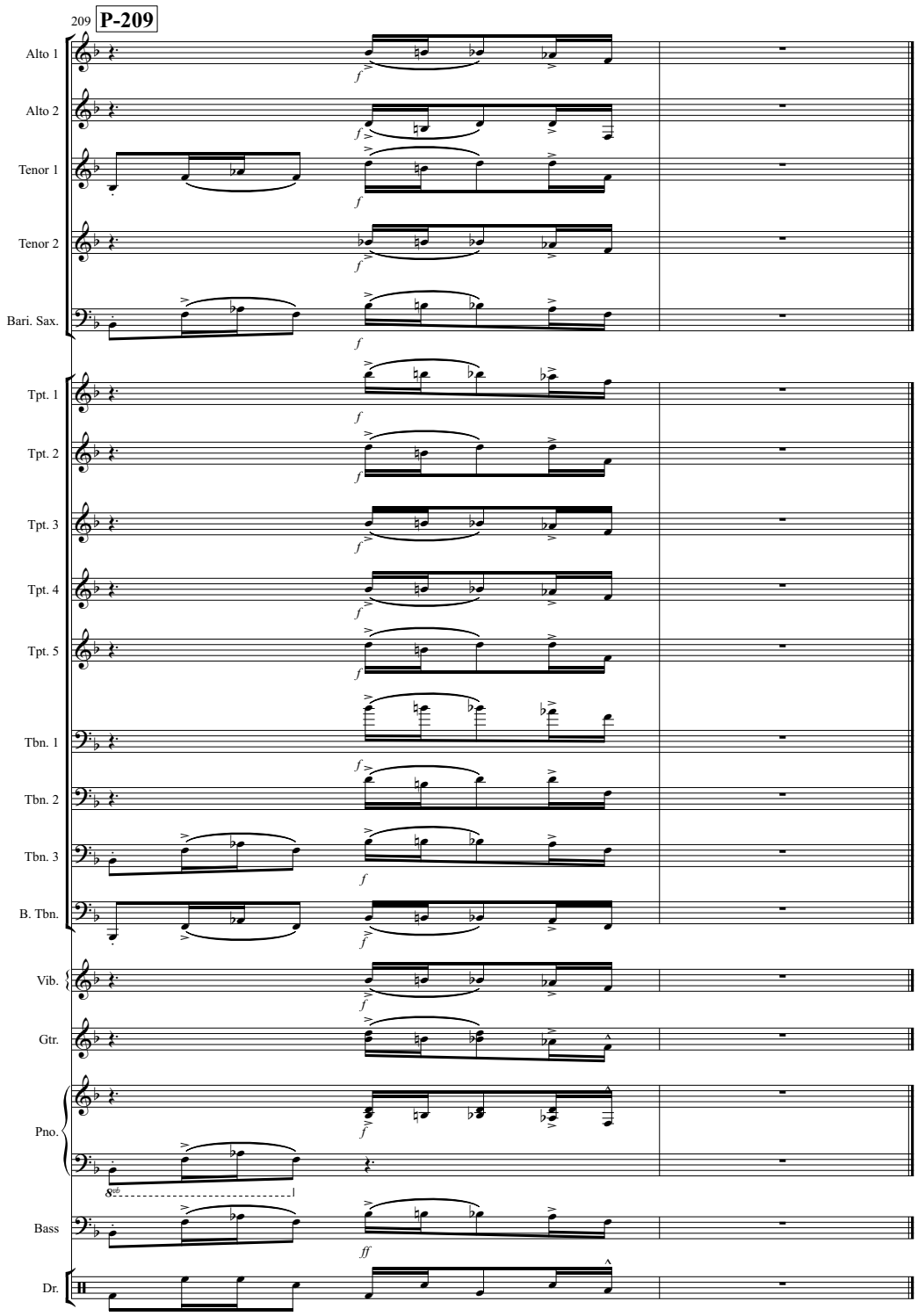

O-175 | 183 | 191
175
F7(♯11/♭9) add13
G♭7(♯11/♭9) add13
F7(♯11/♭9) add13
G♭7(♯11/♭9) add13
Alto 1
Tenor 1
Bari. Sax.
mf
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
play1st & 3rd time
f
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Comp & fill
Pno.
Bass
/C
build & set up 3rd ending
Dr.


179 | 187 | 195
179
1.2.
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
play3rd time only
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 2
Tbn. 3
Vib.
Gtr.
Pno.
Bass
Dr.
add13
mf
f
ff


3.
197
197
199
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
open
F7 -solo
gliss.
Ped.
F G♭ G A♭ A
B♭ B C E♭ E
3.


201
201
F7 solo-join with trombone
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Alto joins in
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
F
A♭
B♭
etc.
Bass
Dr.


205
P-205
P-207
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
with bass

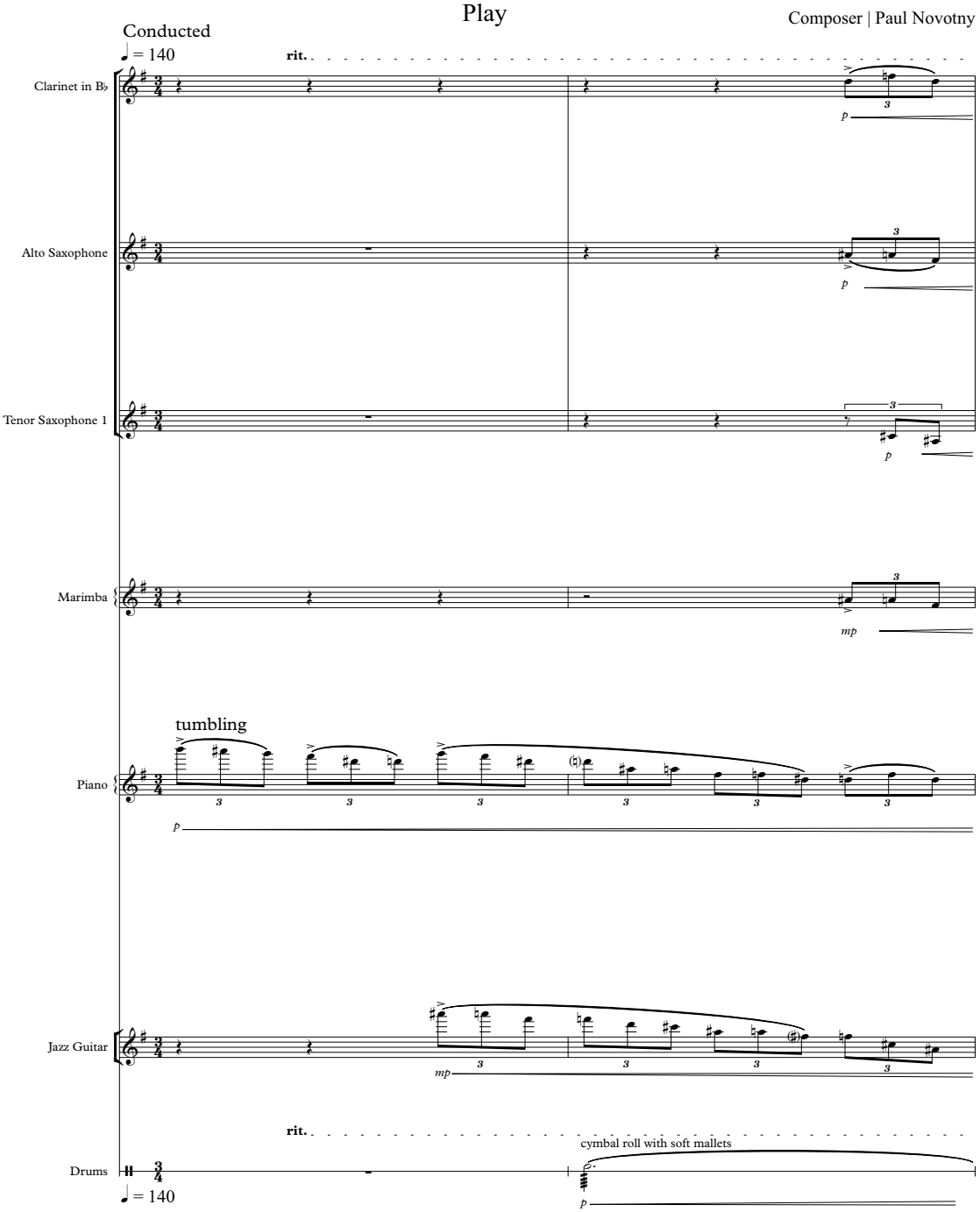

209
P-209
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tpt. 5
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Vib.
Gtr.
Pno.
Bass
Dr.
f
ff

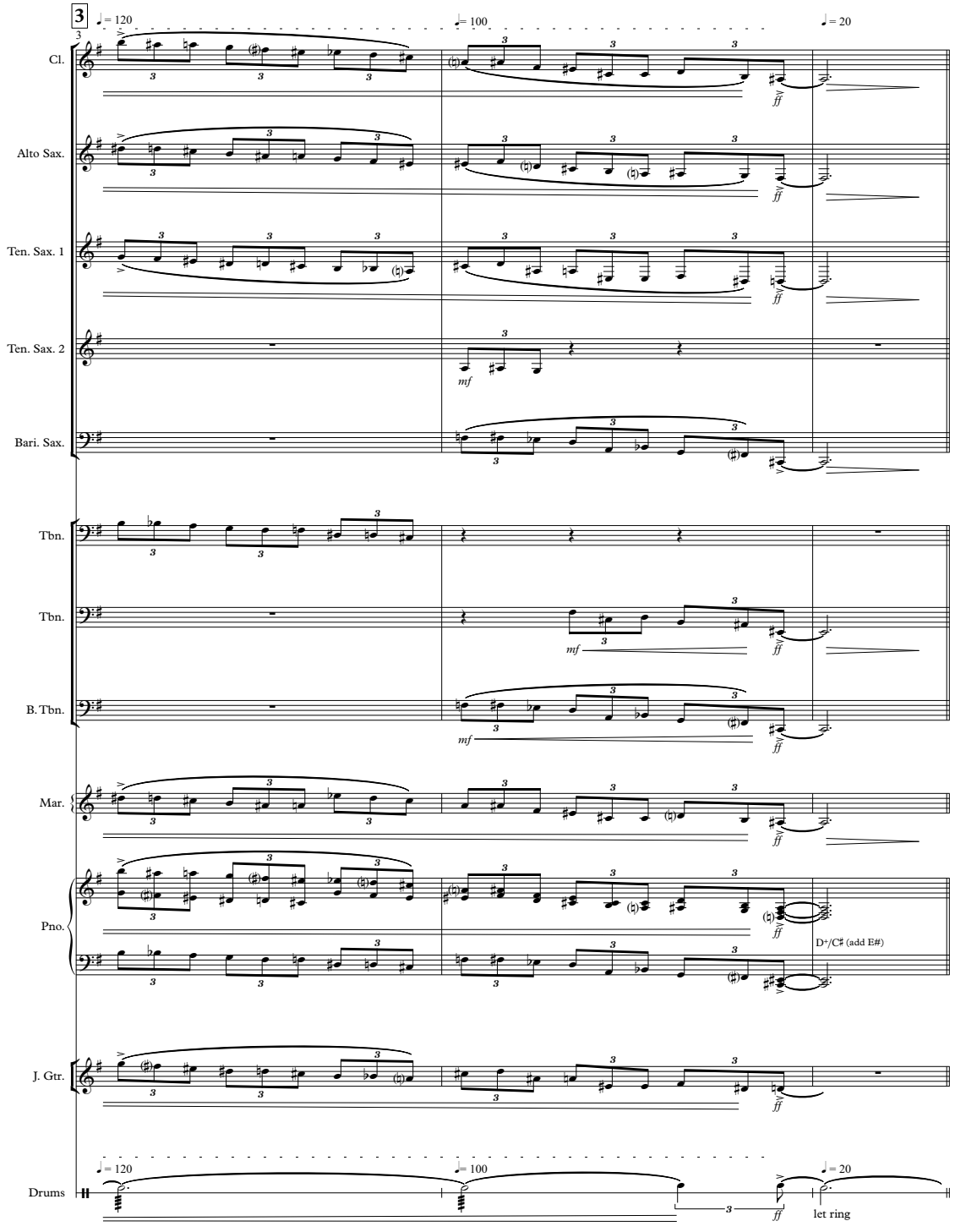
HUMANASONICS

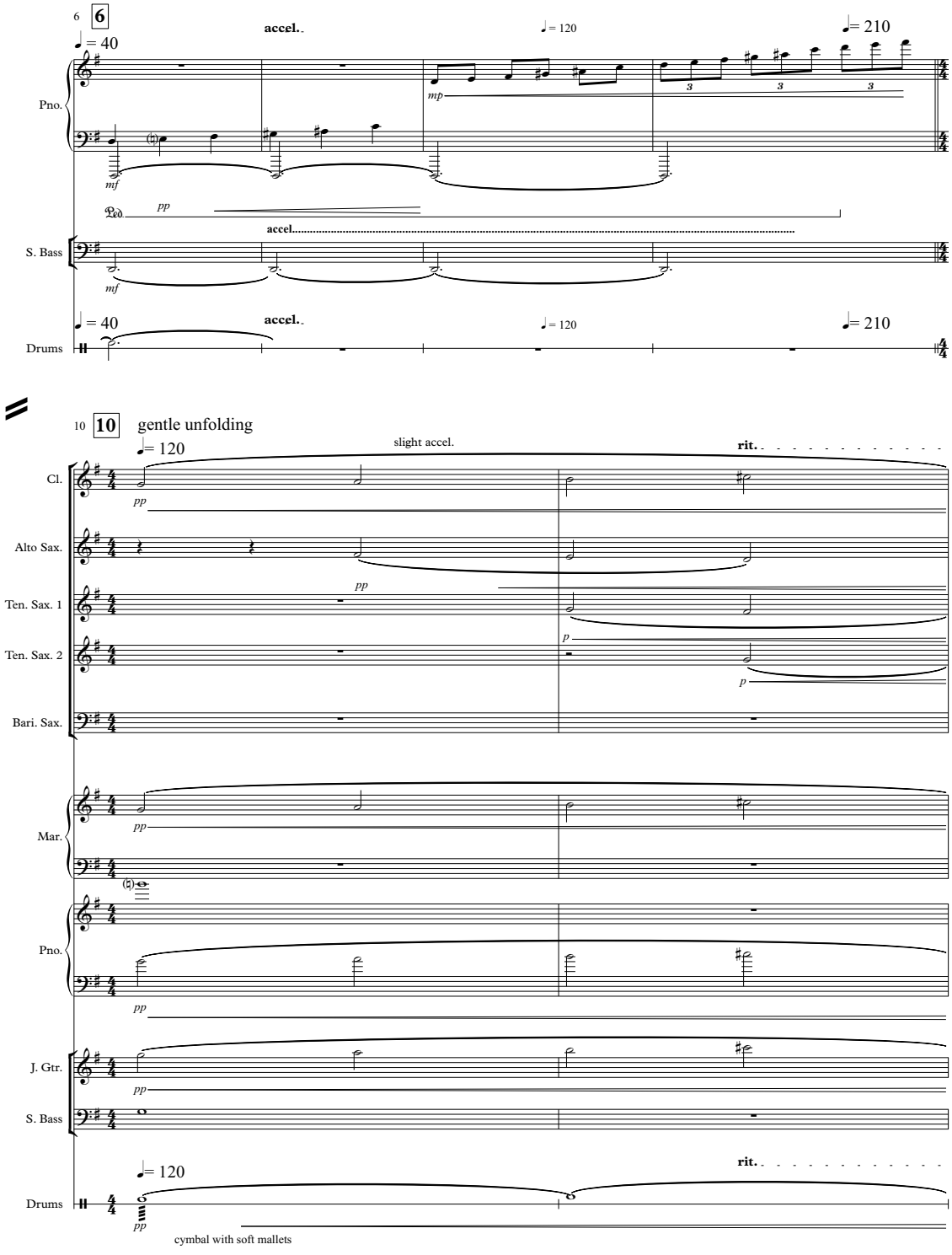
Movement II

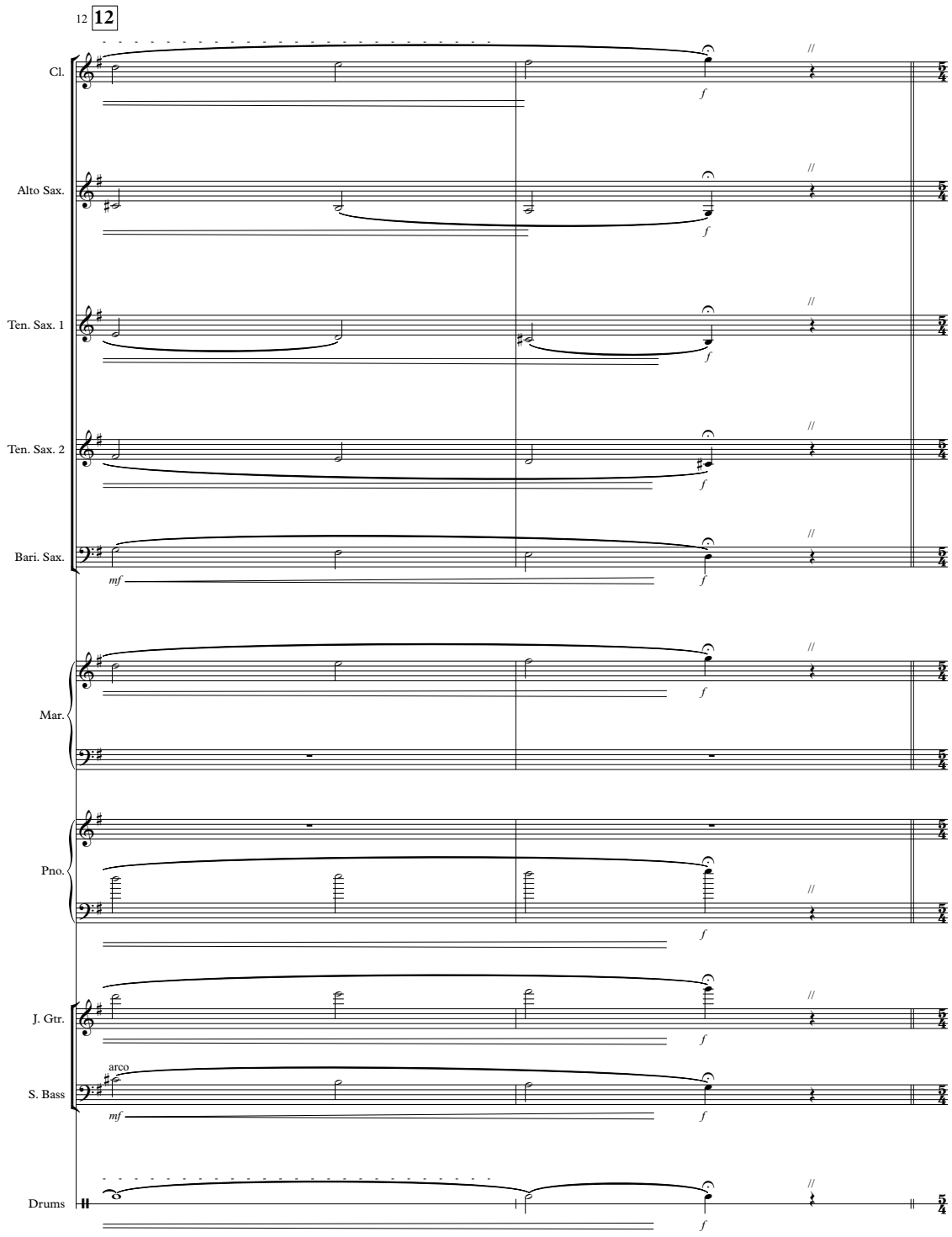
Play

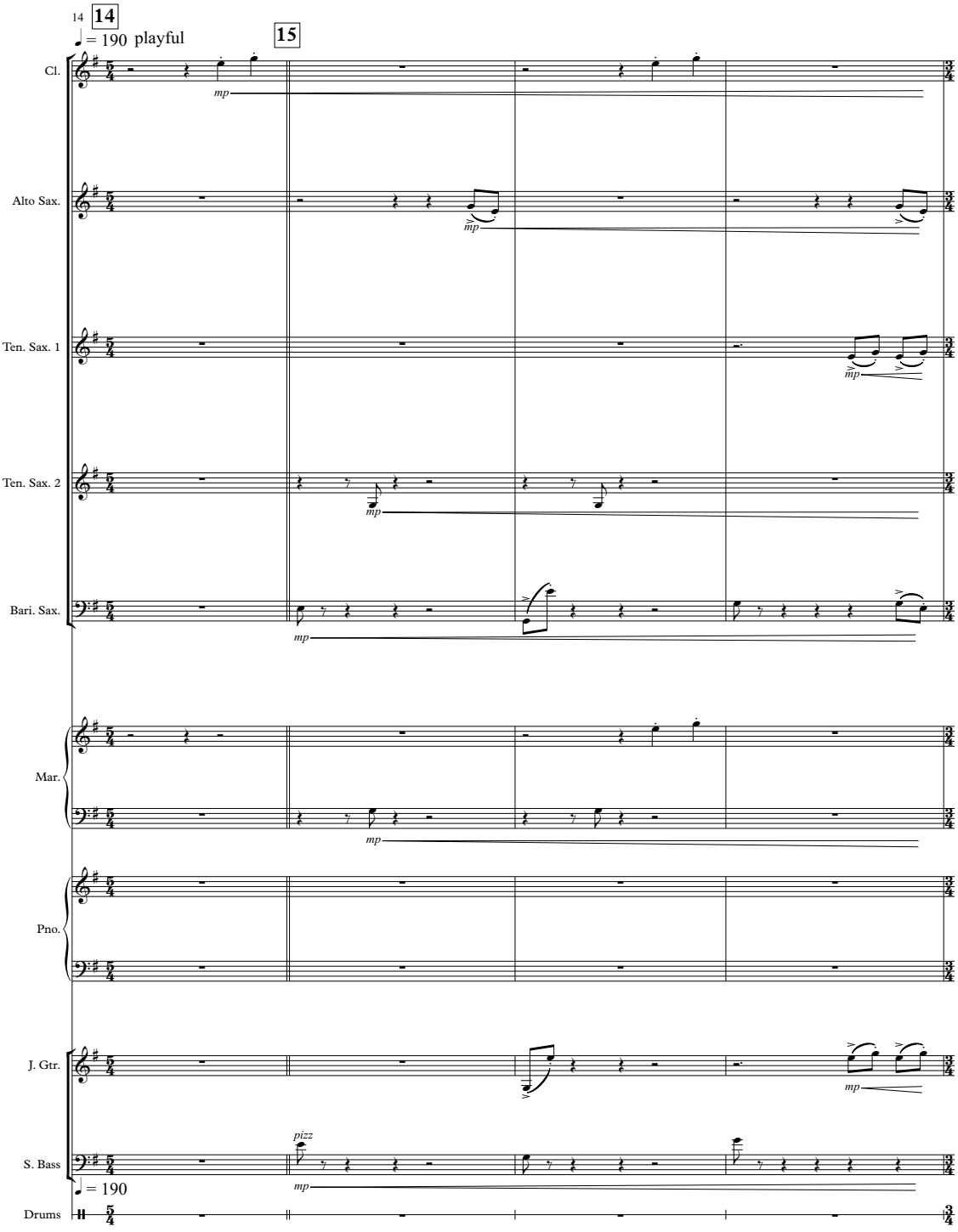
Composer | Paul Novotny

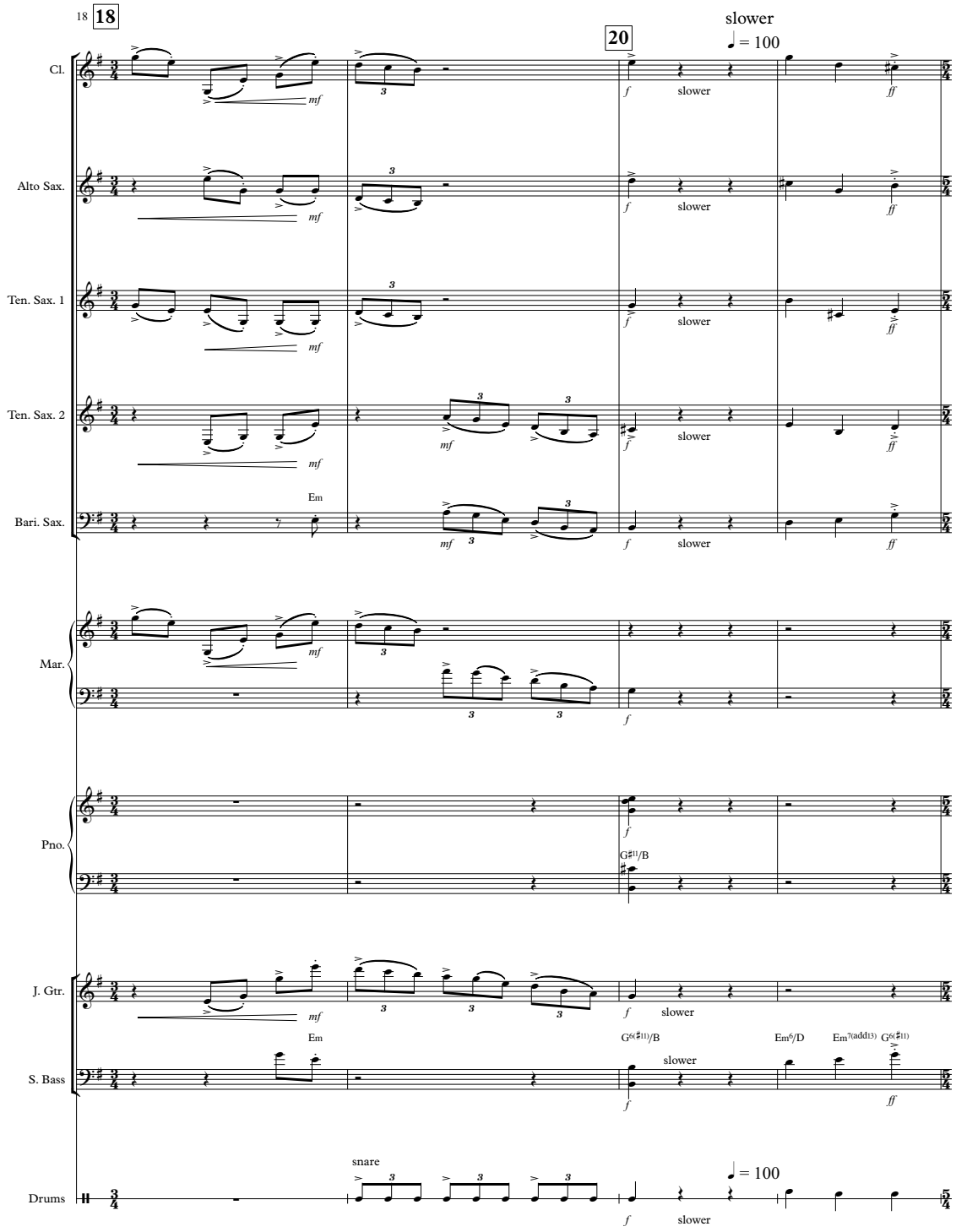


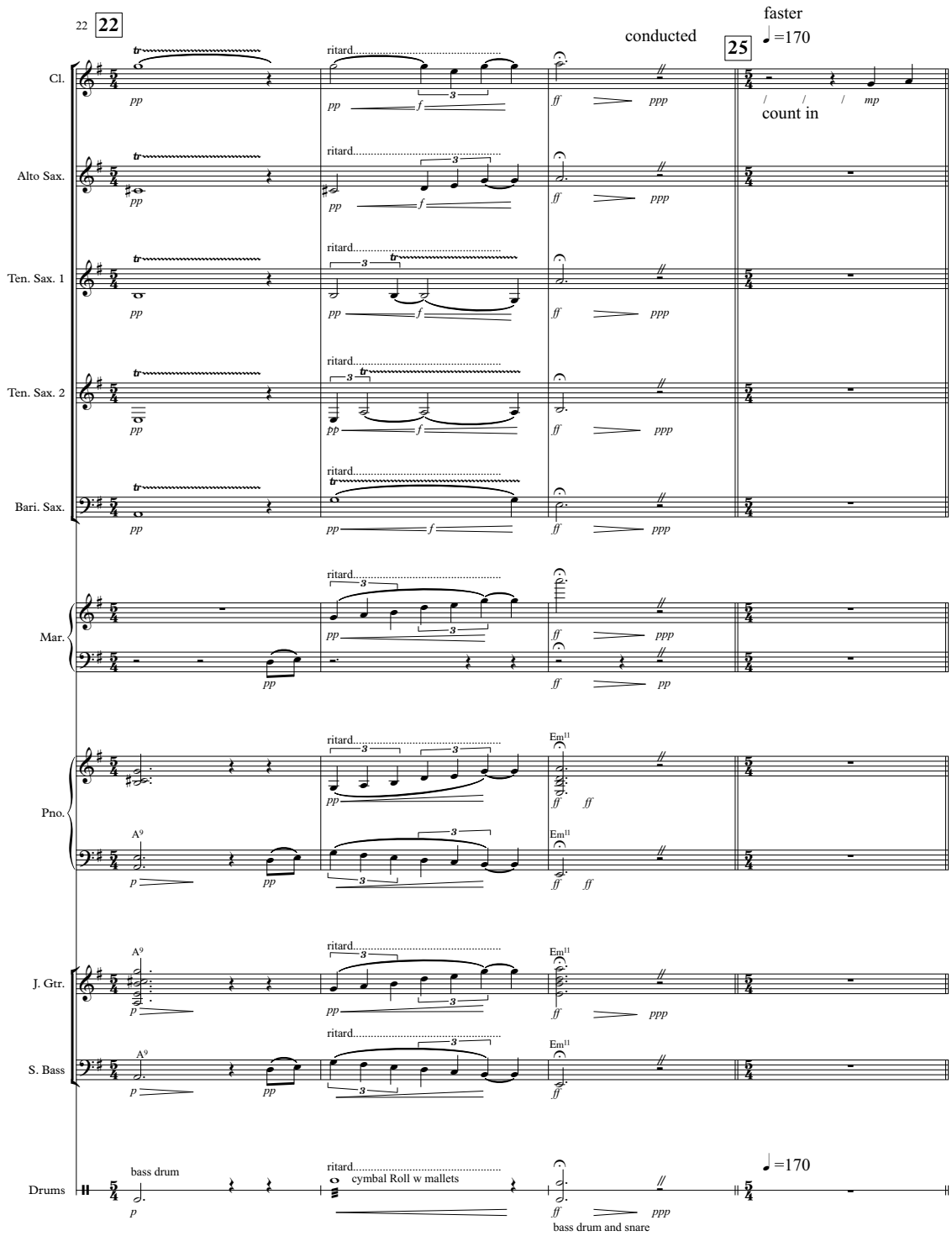

3
♩= 120
♩= 100
♩= 20
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
Drums
mf
ff
D+/C♯ (add E#)
let ring

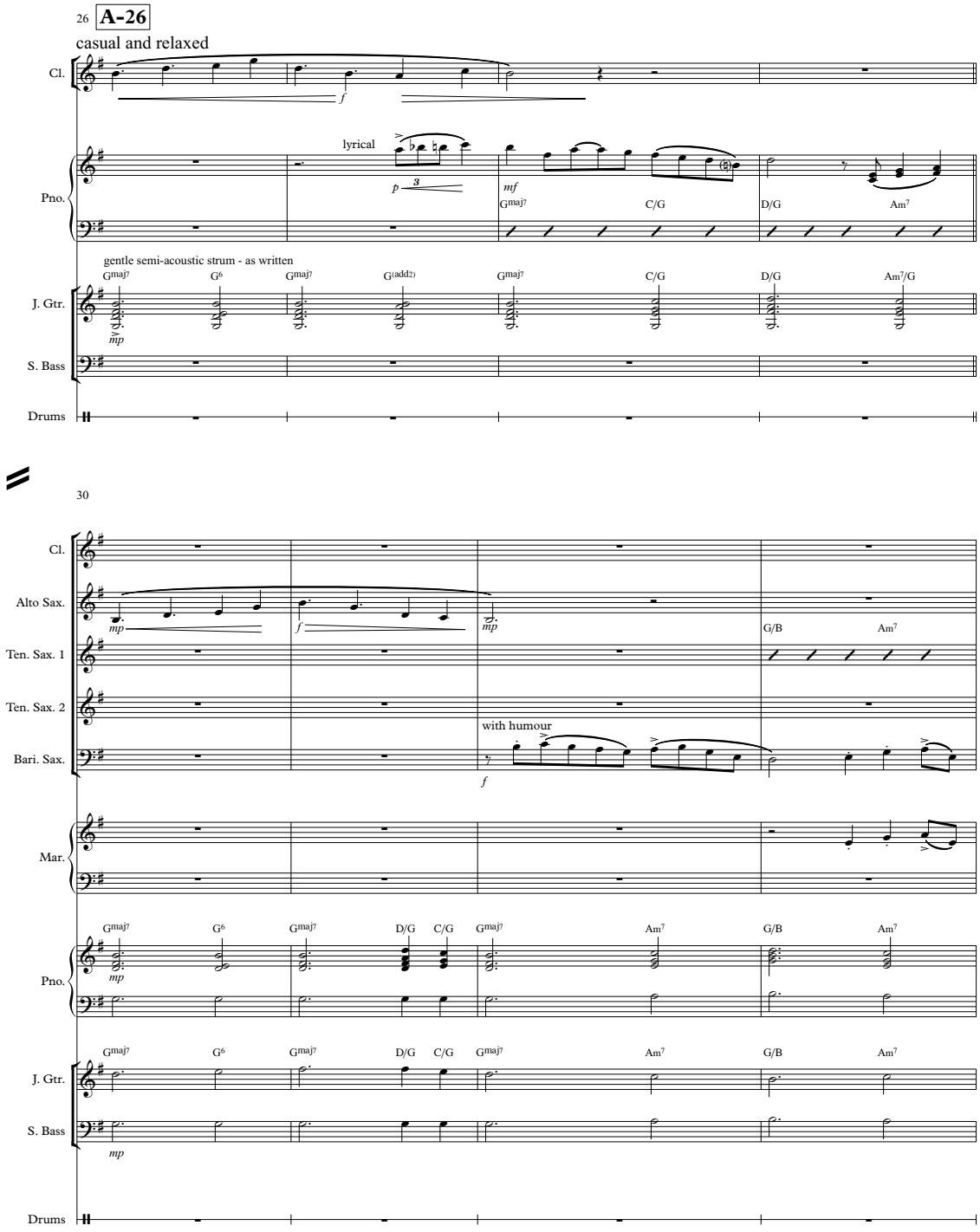

6
6
accel.
= 120
= 210
= 40
Pno.
mp
mf
Ped.
pp
accel.
S. Bass
mf
= 40
accel.
= 120
= 210
Drums
10
10
gentle unfolding
= 120
slight accel.
rit.
Cl.
pp
Alto Sax.
Ten. Sax. 1
pp
Ten. Sax. 2
p
p
Bari. Sax.
Mar.
pp
Pno.
pp
J. Gtr.
pp
S. Bass
= 120
rit.
Drums
pp
cymbal with soft mallets

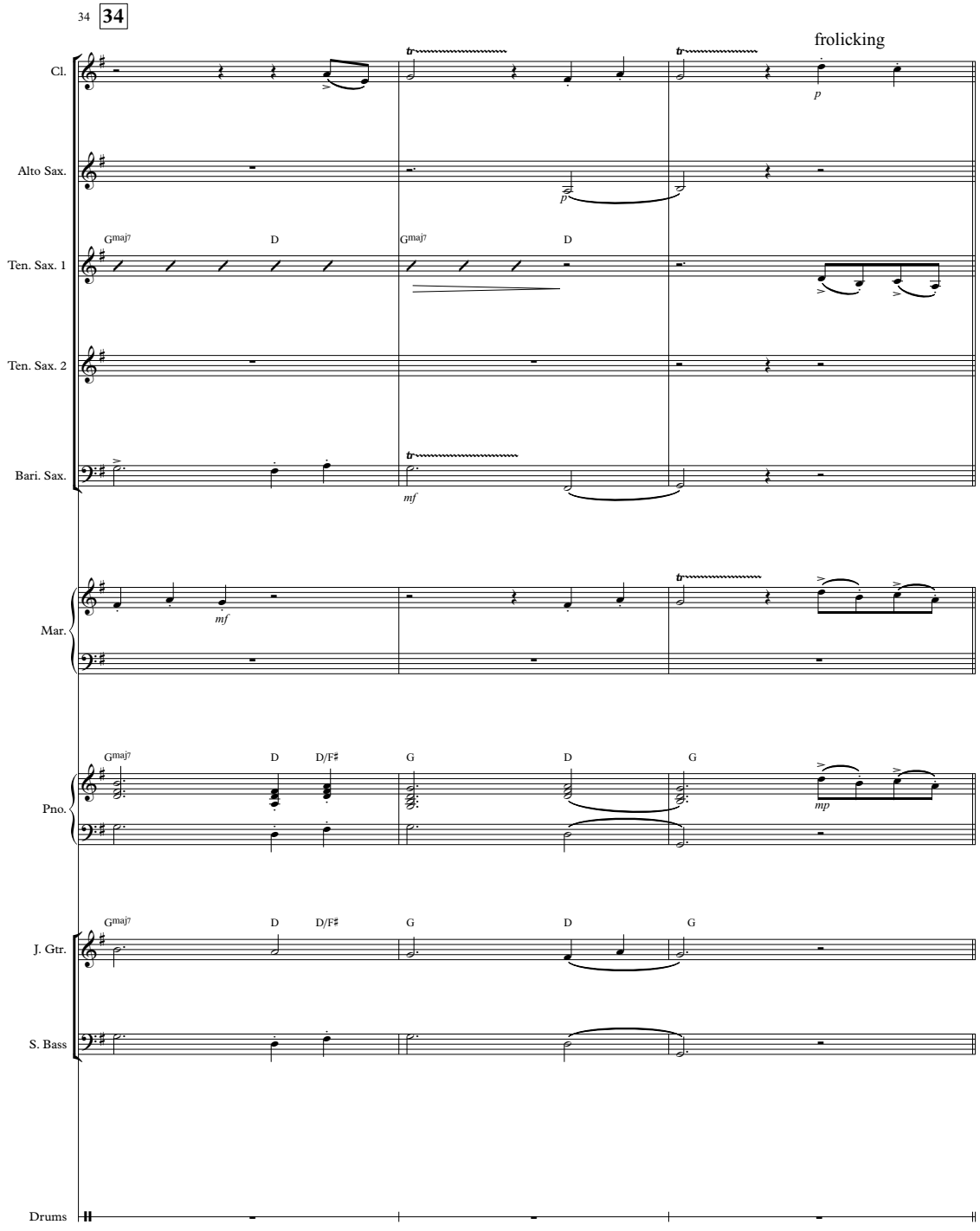

12
12
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
arco
mf
f

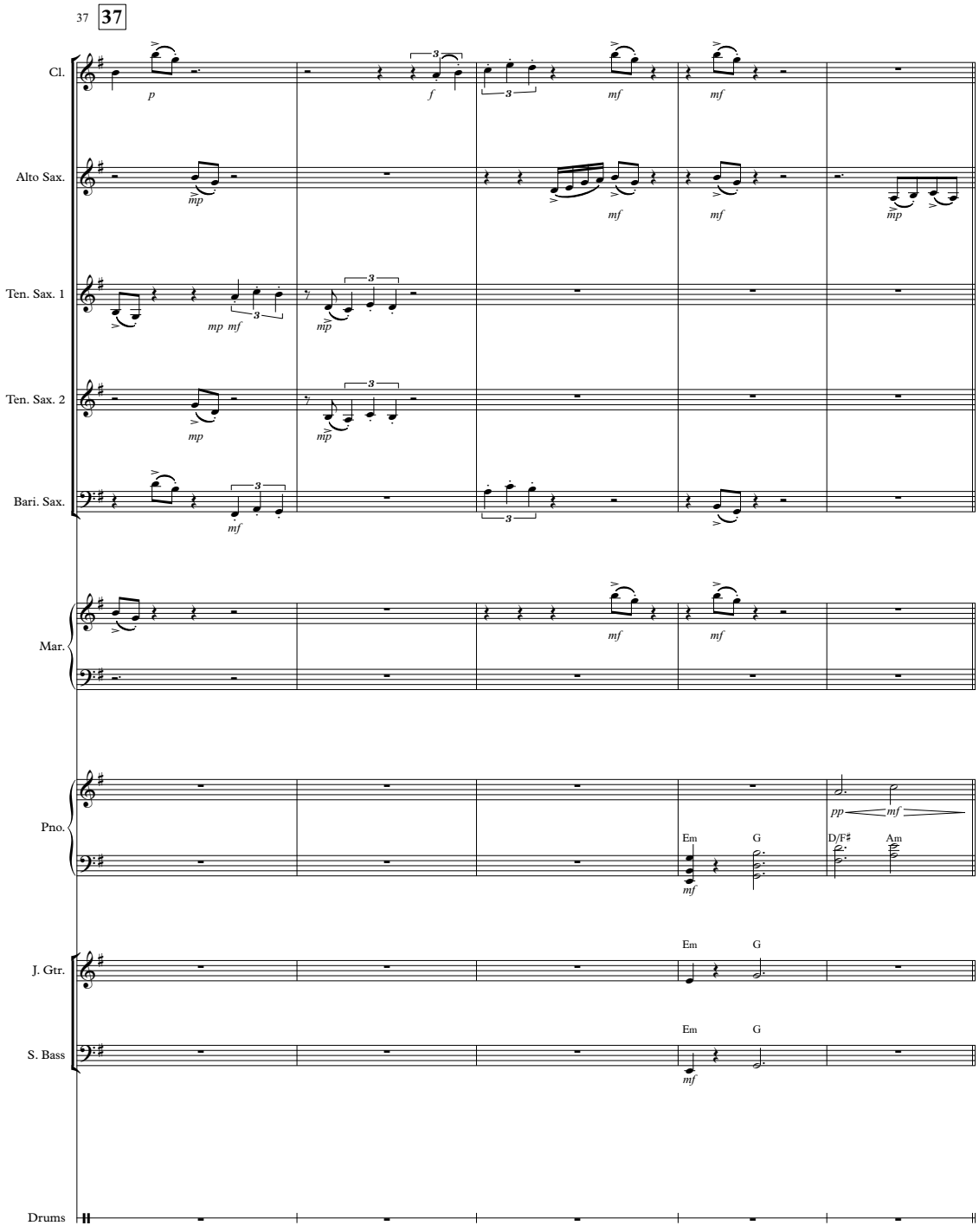

14
14
= 190 playful
15
Cl.
mp
Alto Sax.
mp
Ten. Sax. 1
mp
Ten. Sax. 2
mp
Bari. Sax.
mp
Mar.
mp
Pno.
J. Gtr.
mp
pizz
S. Bass
mp
= 190
Drums

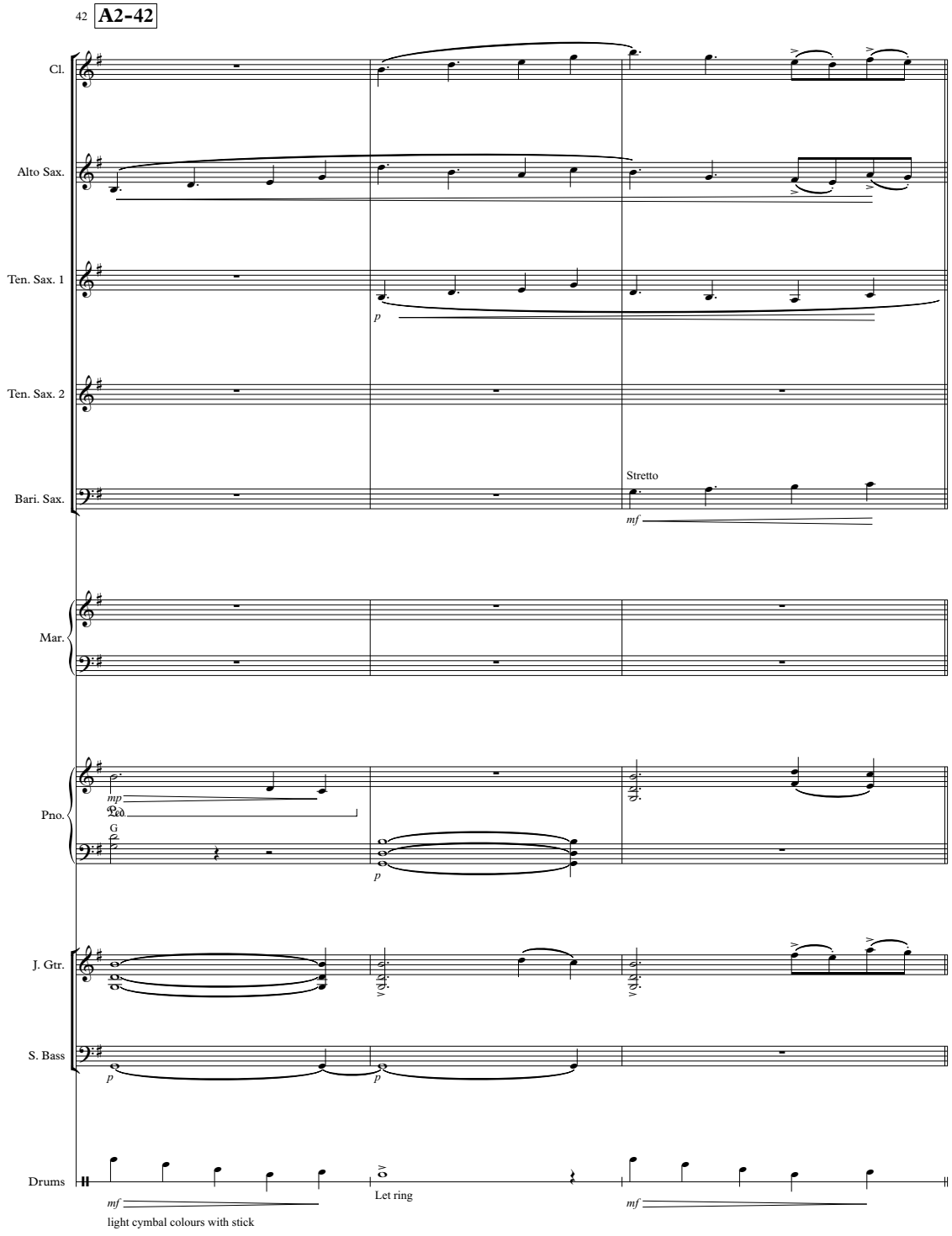

18
18
20
slower
♩ = 100
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
mf
f
ff
slower
Em
G♯11/B
Em6/D
Em7(add13)
G6(♯11)
snare
♩ = 100

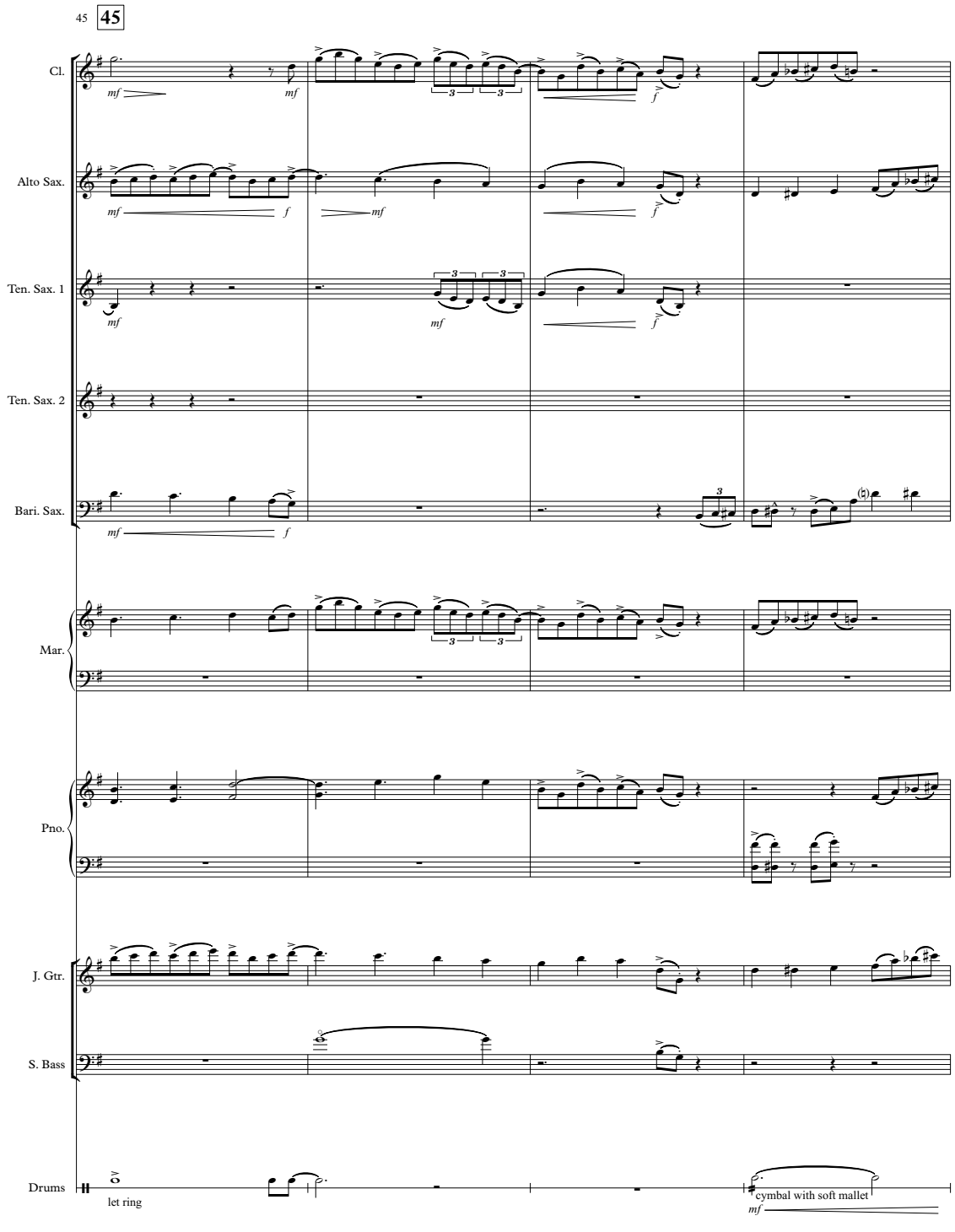

22
22
conducted
25
faster
♩=170
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
ritard.
count in
bass drum
cymbal Roll w mallets
bass drum and snare
A9
Em11

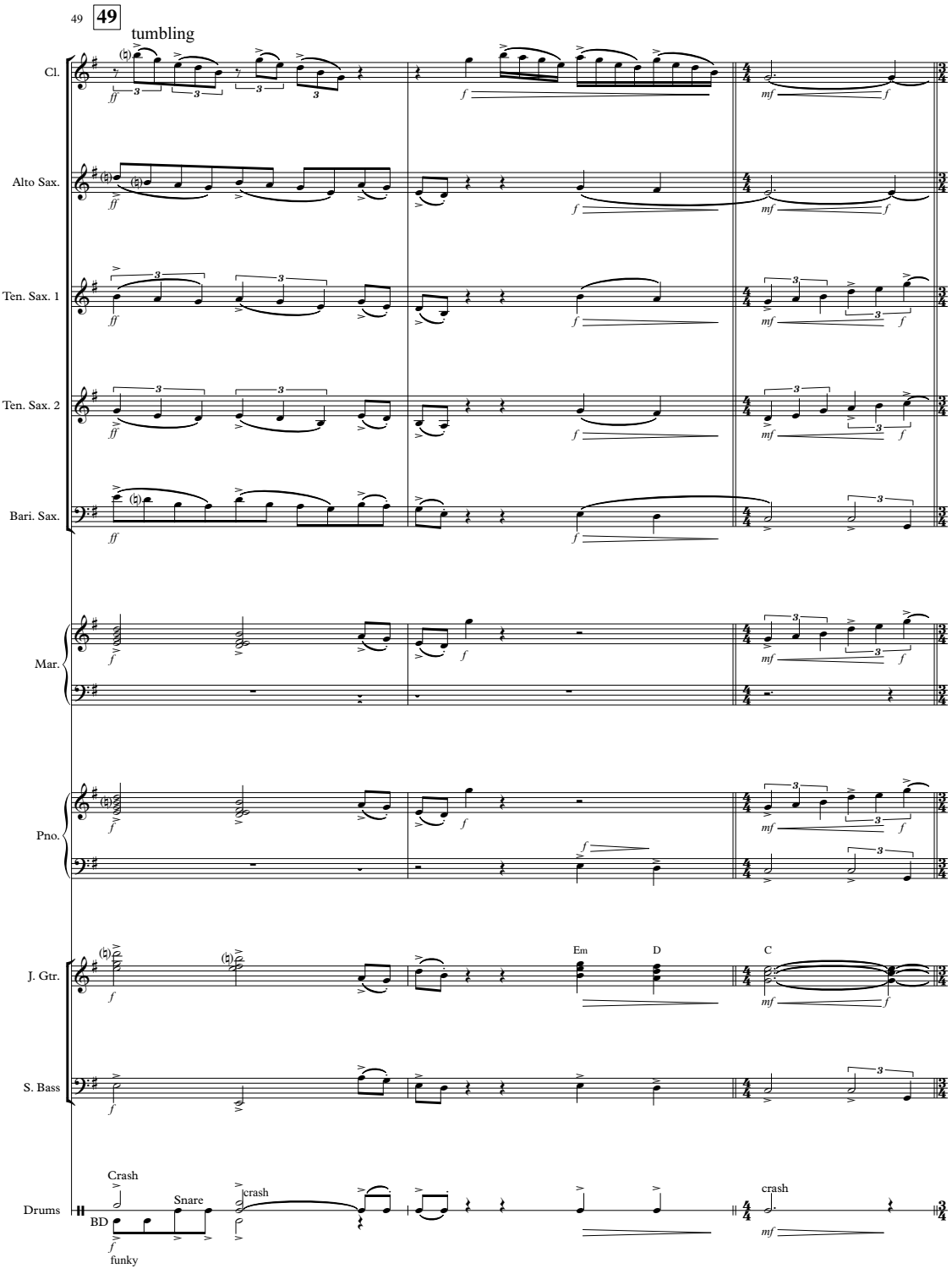

26
A-26
casual and relaxed
Cl.
f
lyrical
Pno.
p
3
mf
Gmaj7
C/G
D/G
Am7
gentle semi-acoustic strum - as written
Gmaj7
G6
Gmaj7
G(add2)
Gmaj7
C/G
D/G
Am7/G
J. Gtr.
mp
S. Bass
Drums
30
Cl.
Alto Sax.
mp
f
mp
G/B
Am7
Ten. Sax. 1
Ten. Sax. 2
with humour
Bari. Sax.
f
Mar.
Gmaj7
G6
Gmaj7
D/G
C/G
Gmaj7
Am7
G/B
Am7
Pno.
mp
Gmaj7
G6
Gmaj7
D/G
C/G
Gmaj7
Am7
G/B
Am7
J. Gtr.
S. Bass
mp
Drums

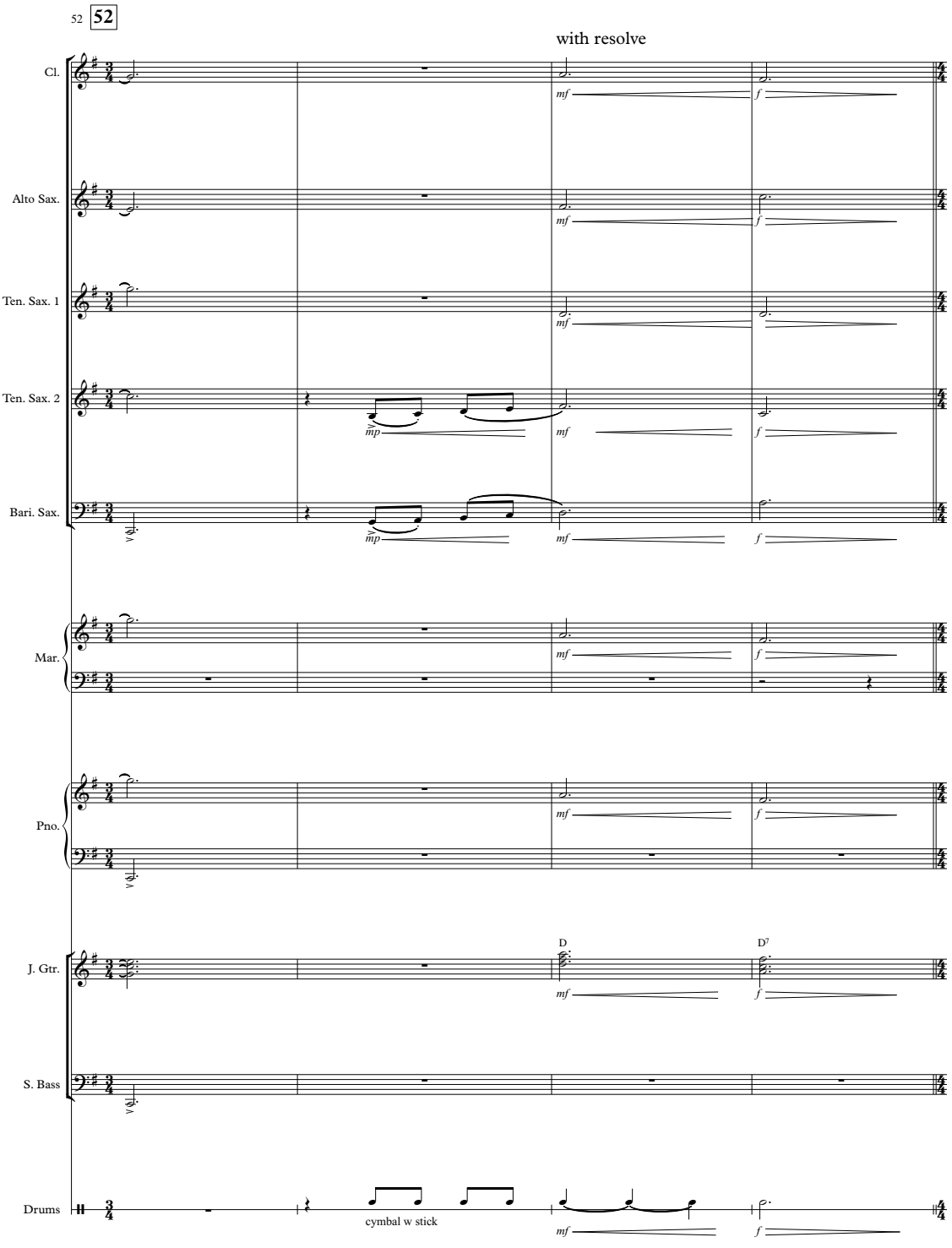

34
34
frolicking
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Gmaj7
D
D/F♯
G
p
mf
mp

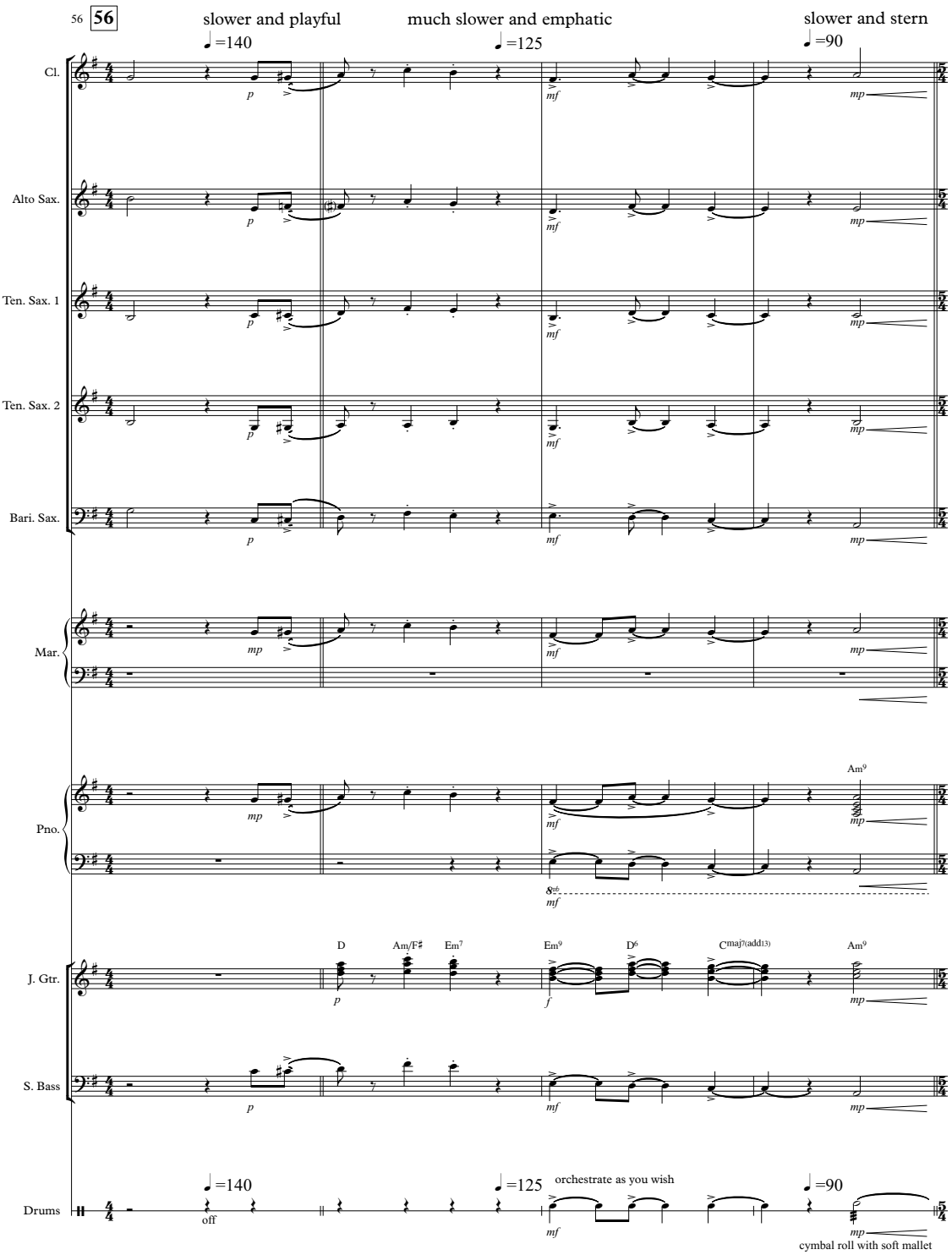

37
37
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Em
G
D/F♯
Am

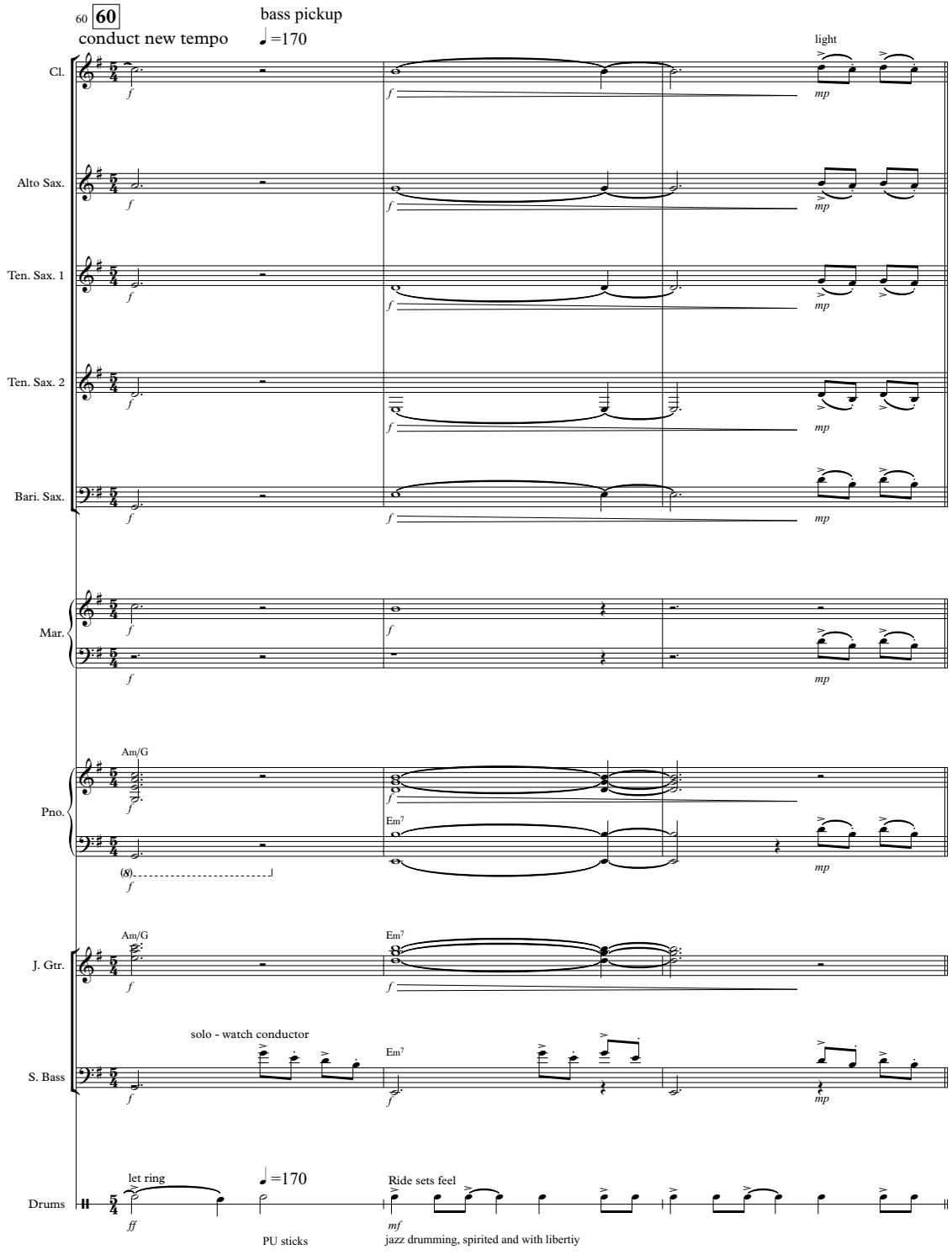

42
A2-42
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Stretto
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Let ring
light cymbal colours with stick

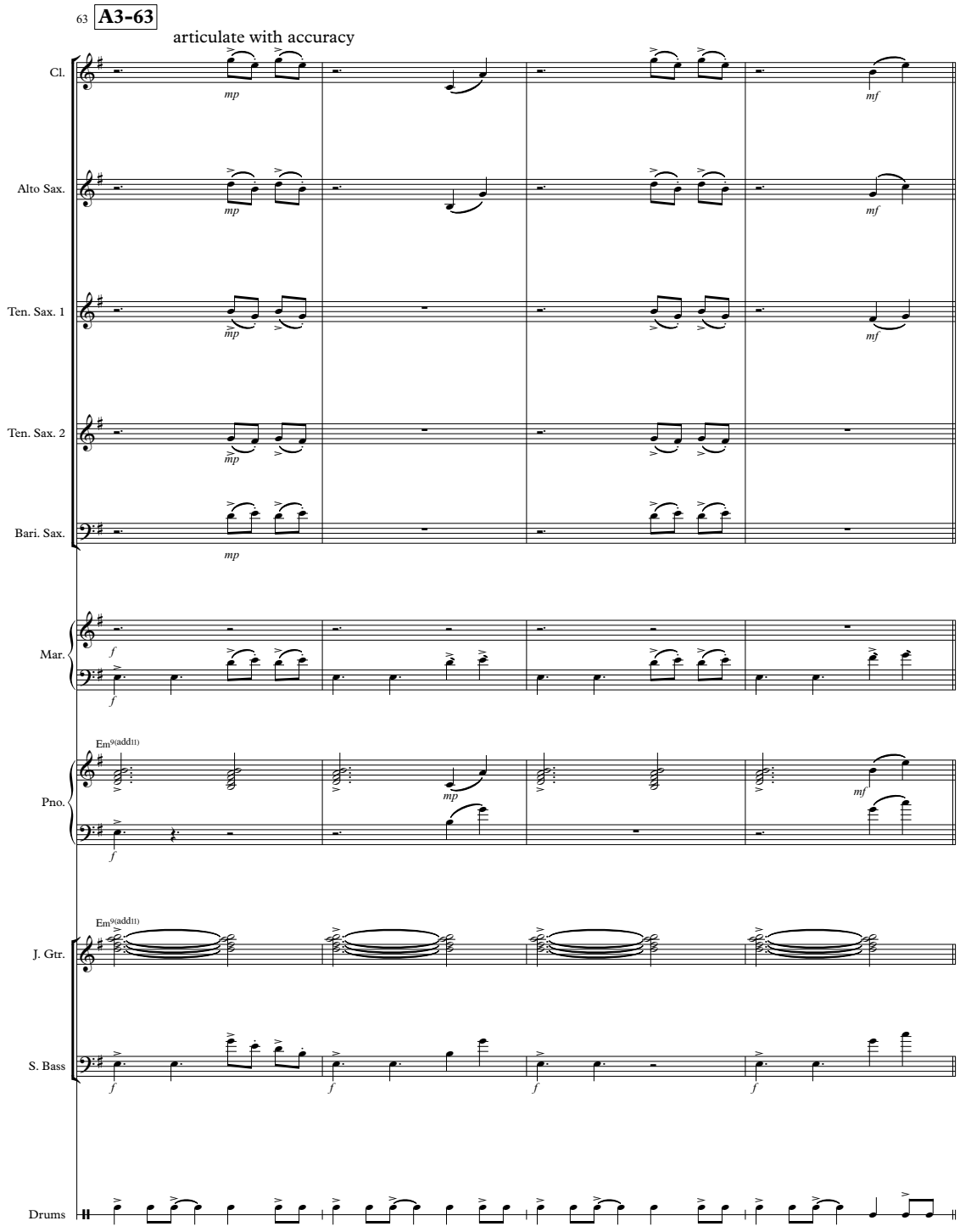

45
45
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
mf
f
let ring
cymbal with soft mallet

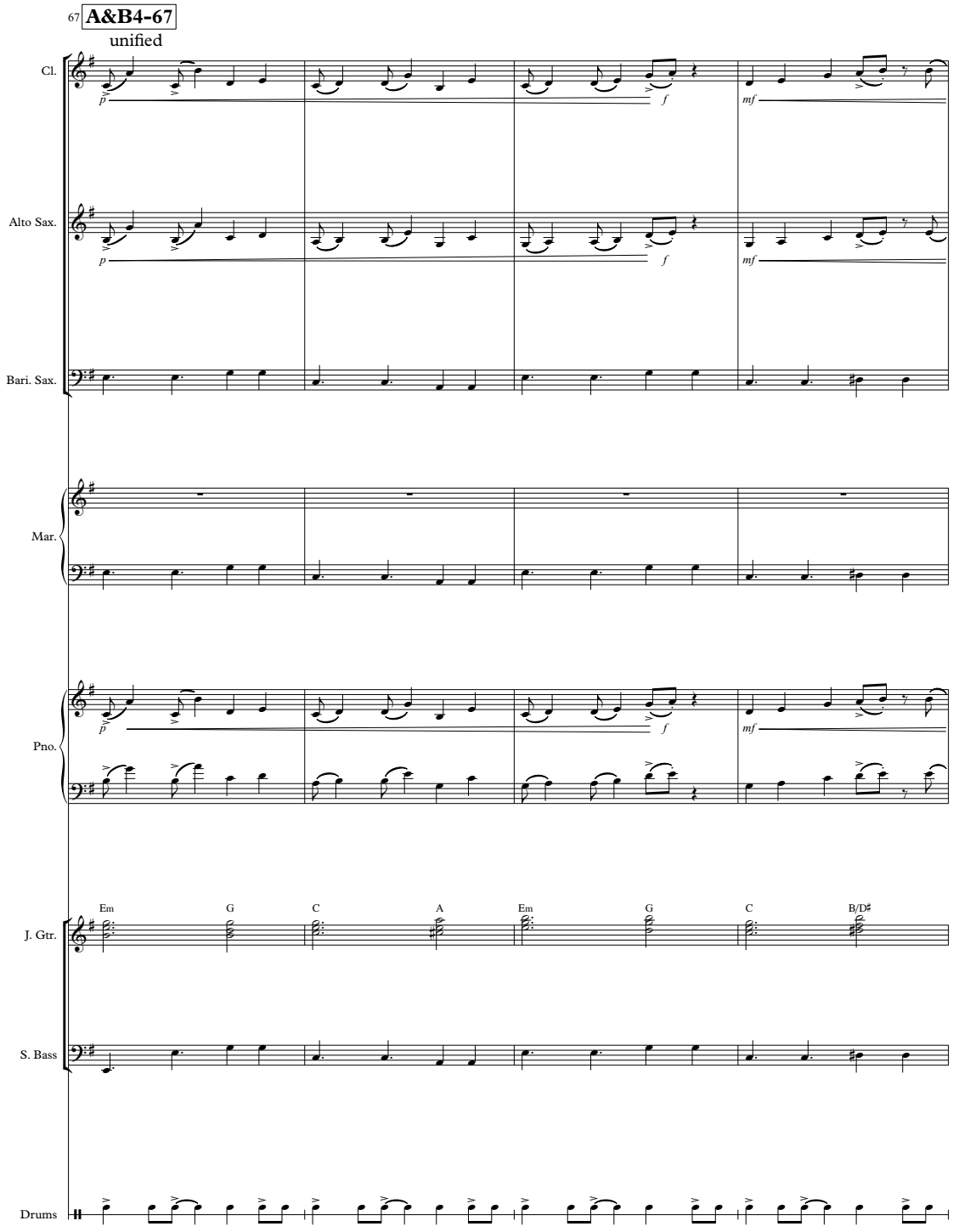

49
49
tumbling
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Em
D
C
Crash
Snare
crash
crash
BD
funky

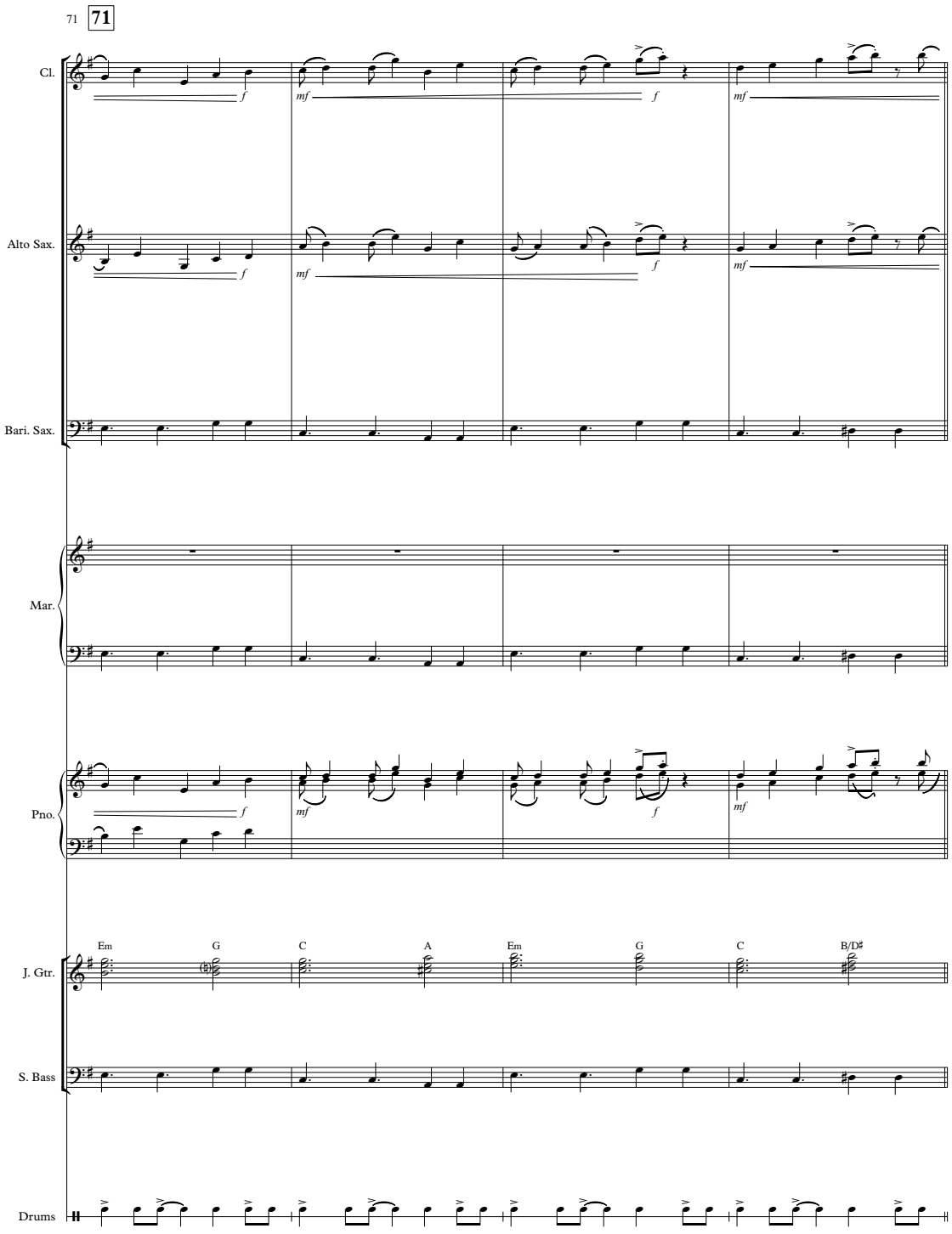

52
52
with resolve
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
mf
f
mp
D
D7
cymbal w stick

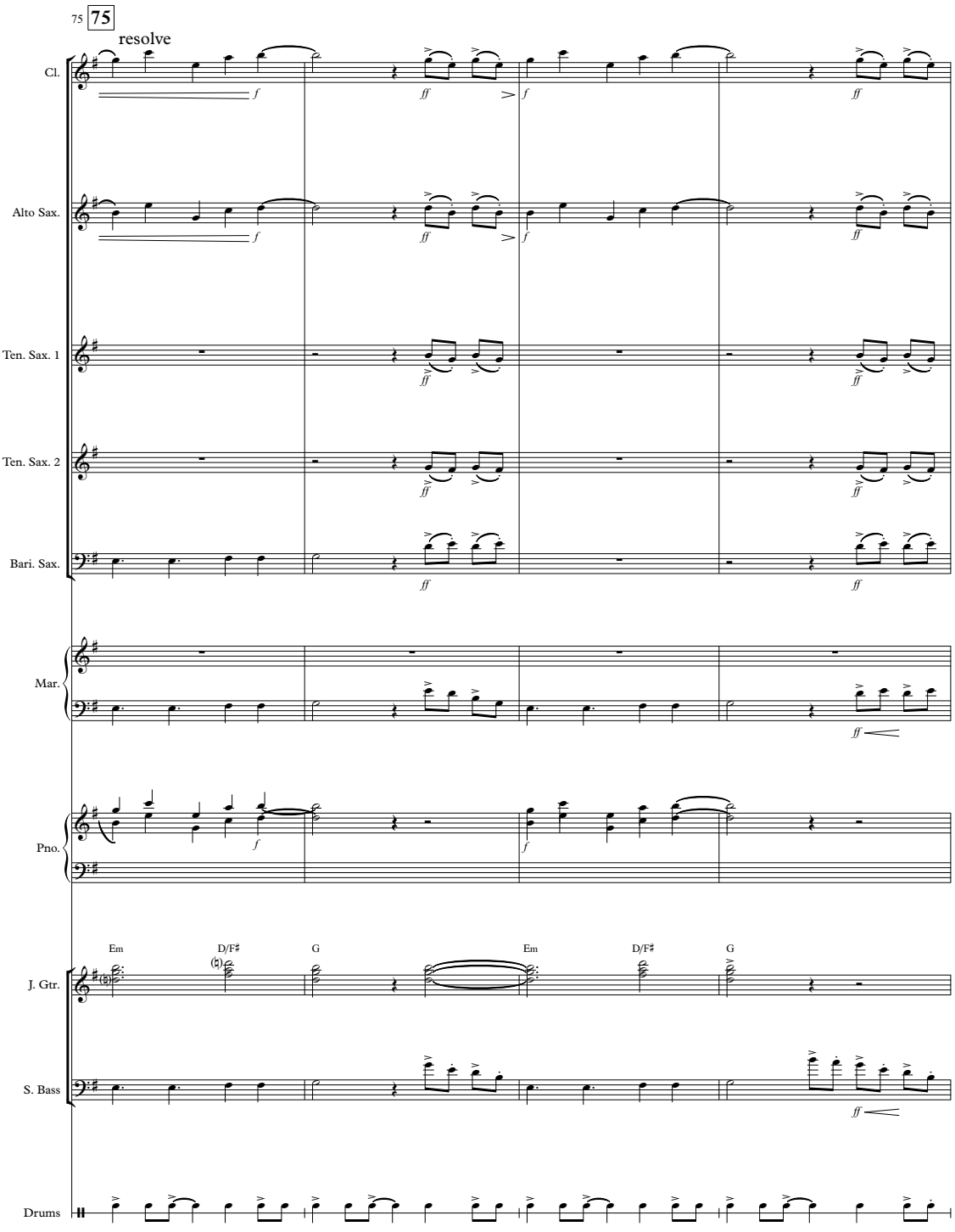

56
56
slower and playful
♩=140
much slower and emphatic
♩=125
slower and stern
♩=90
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
D
Am/F♯
Em7
Em9
D6
Cmaj7(add13)
Am9
orchestrate as you wish
off
cymbal roll with soft mallet

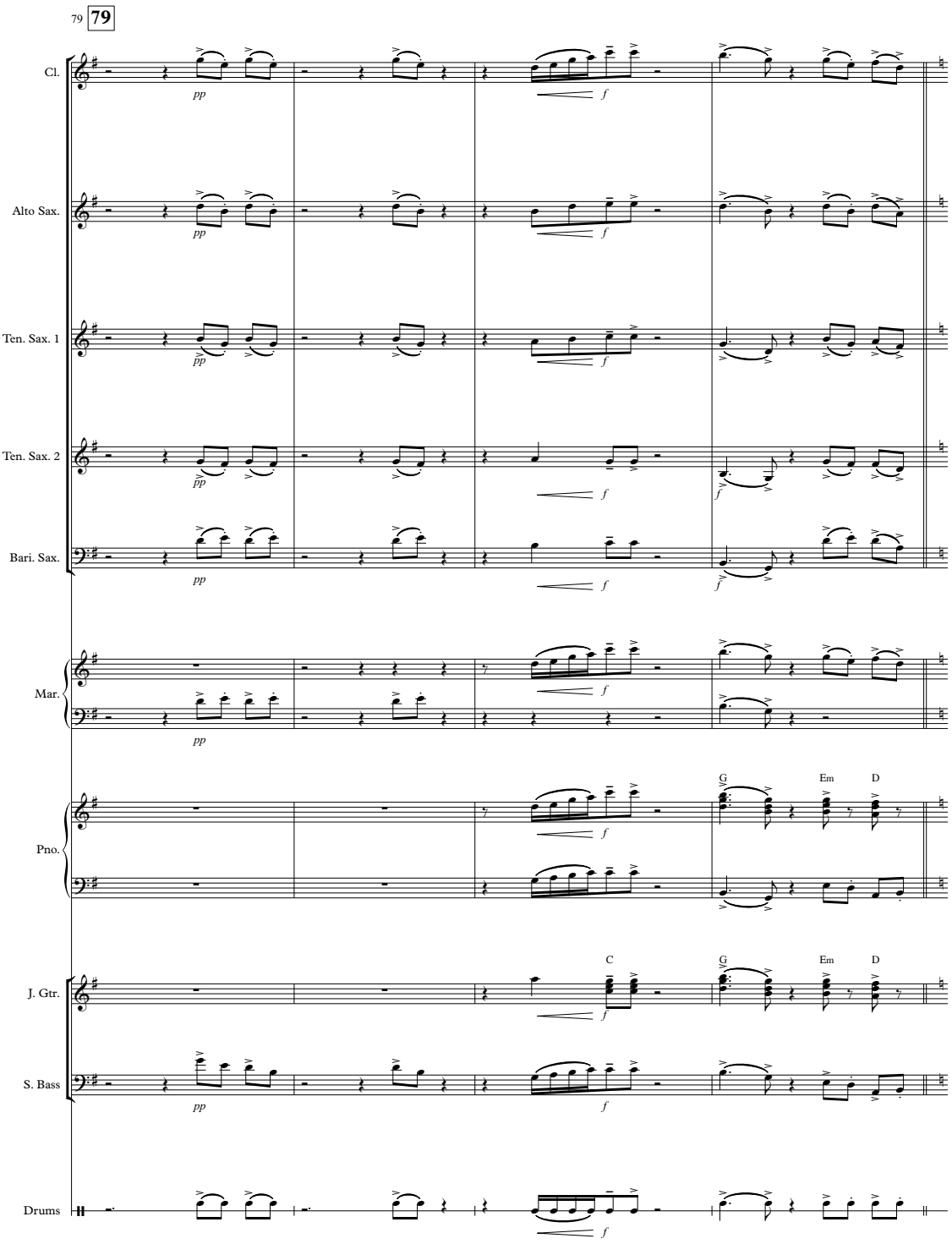

60
60
conduct new tempo
bass pickup
♩=170
light
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
Am/G
Em7
J. Gtr.
solo - watch conductor
S. Bass
Drums
let ring
♩=170
Ride sets feel
PU sticks
jazz drumming, spirited and with libertiy

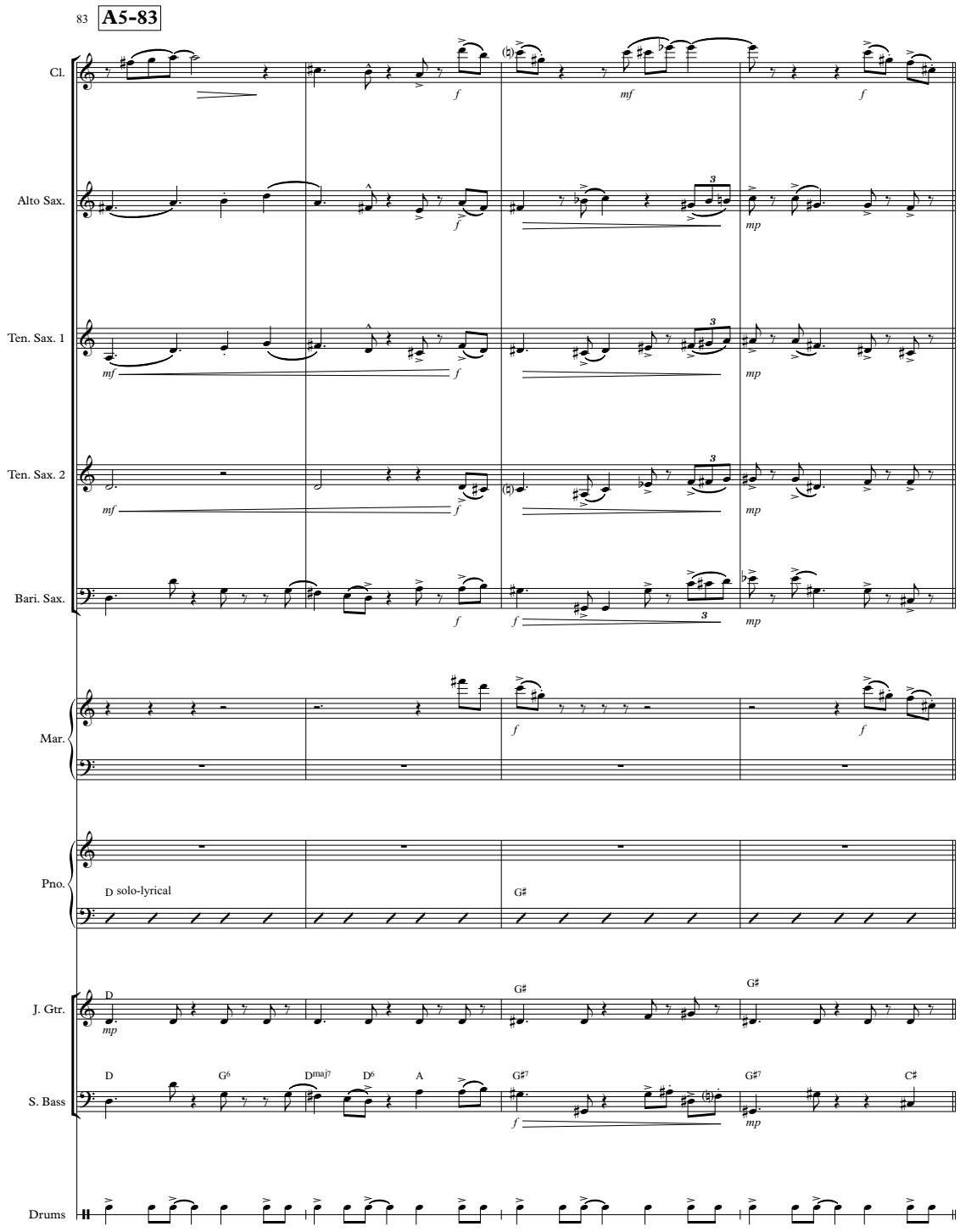

63
A3-63
articulate with accuracy
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Em9(add11)
mp
mf
f

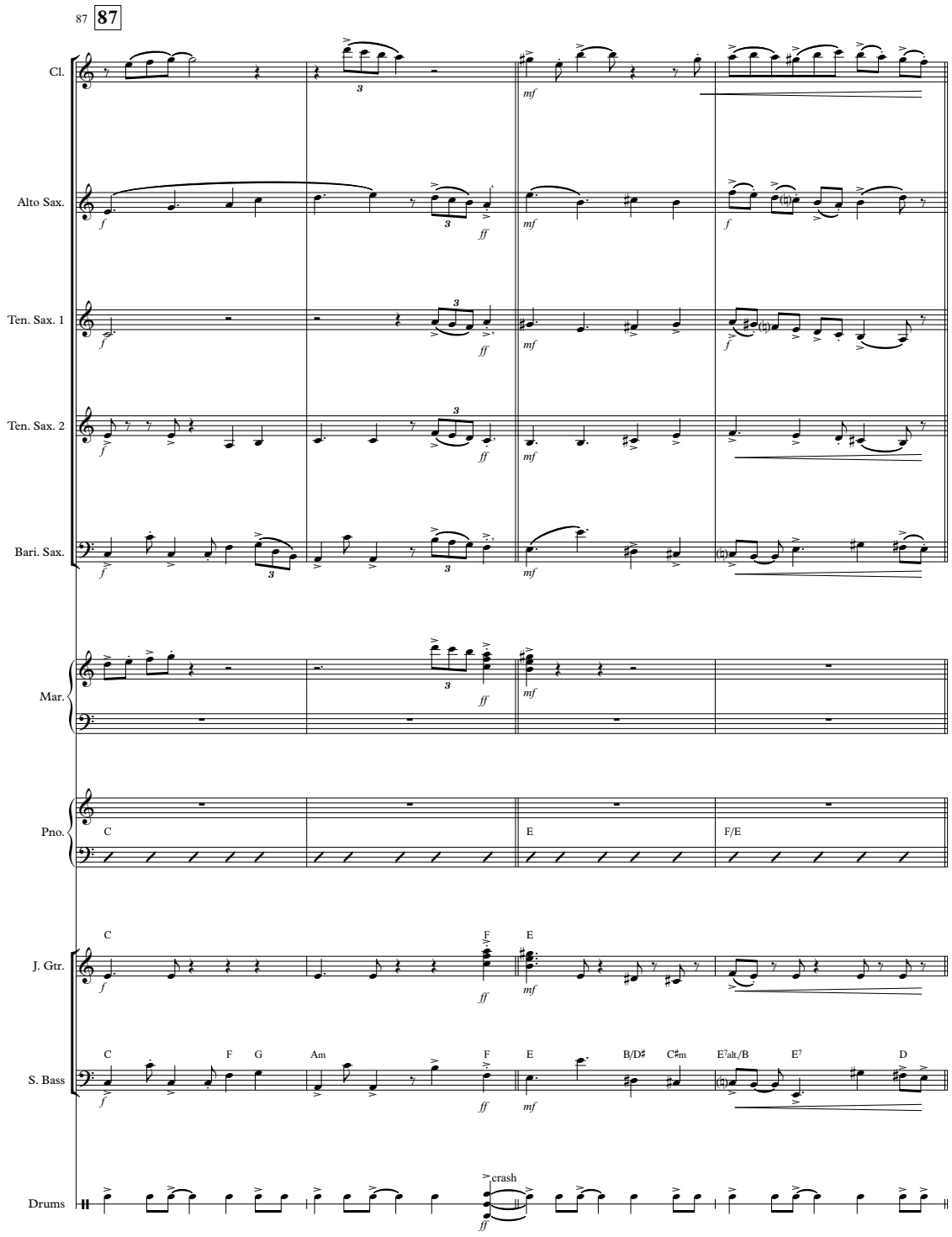

67
A&B4-67
unified
Cl.
Alto Sax.
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Em
G
C
A
Em
G
C
B/D♯
p
f
mf

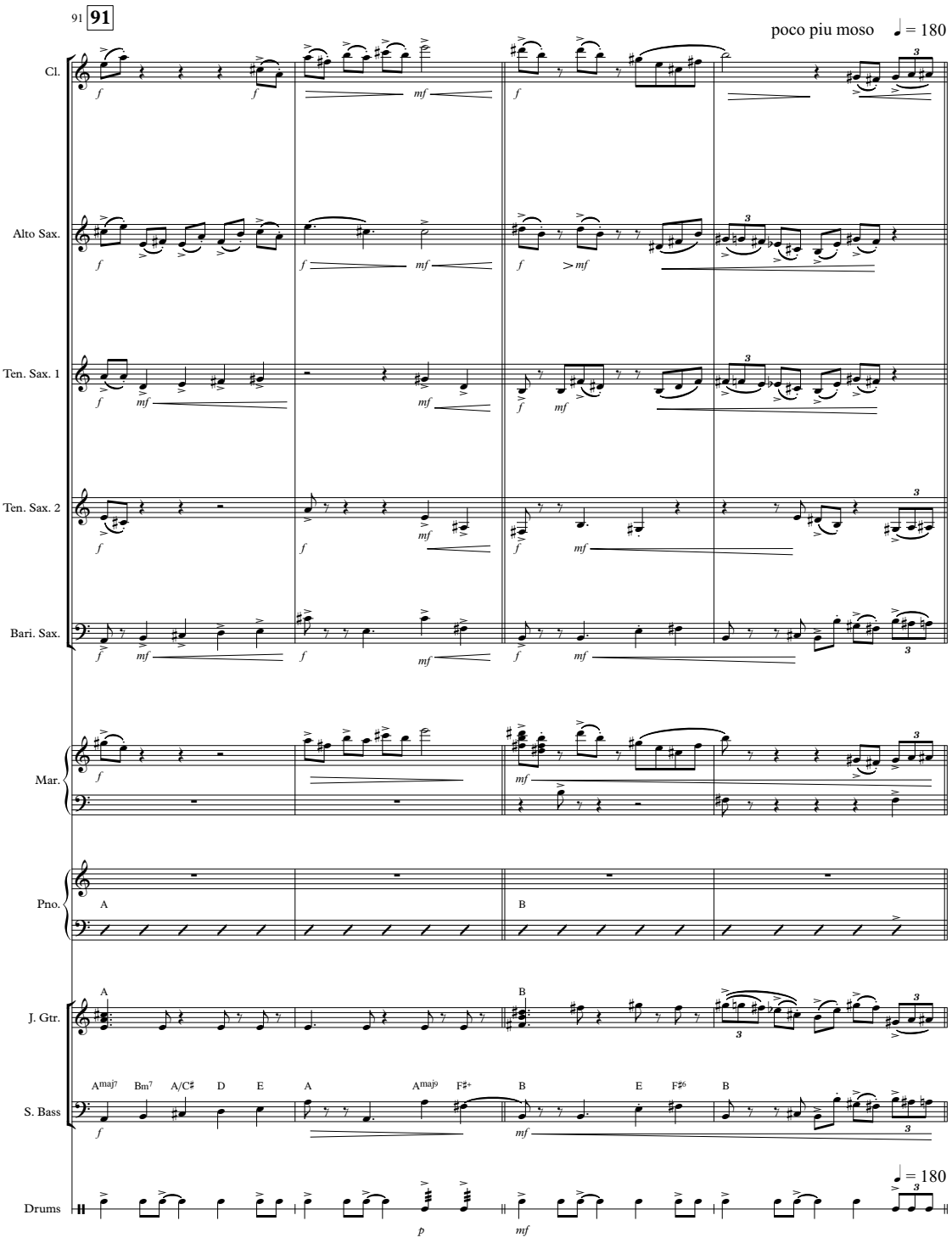

71
71
Cl.
Alto Sax.
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Em
G
C
A
Em
G
C
B/D♯

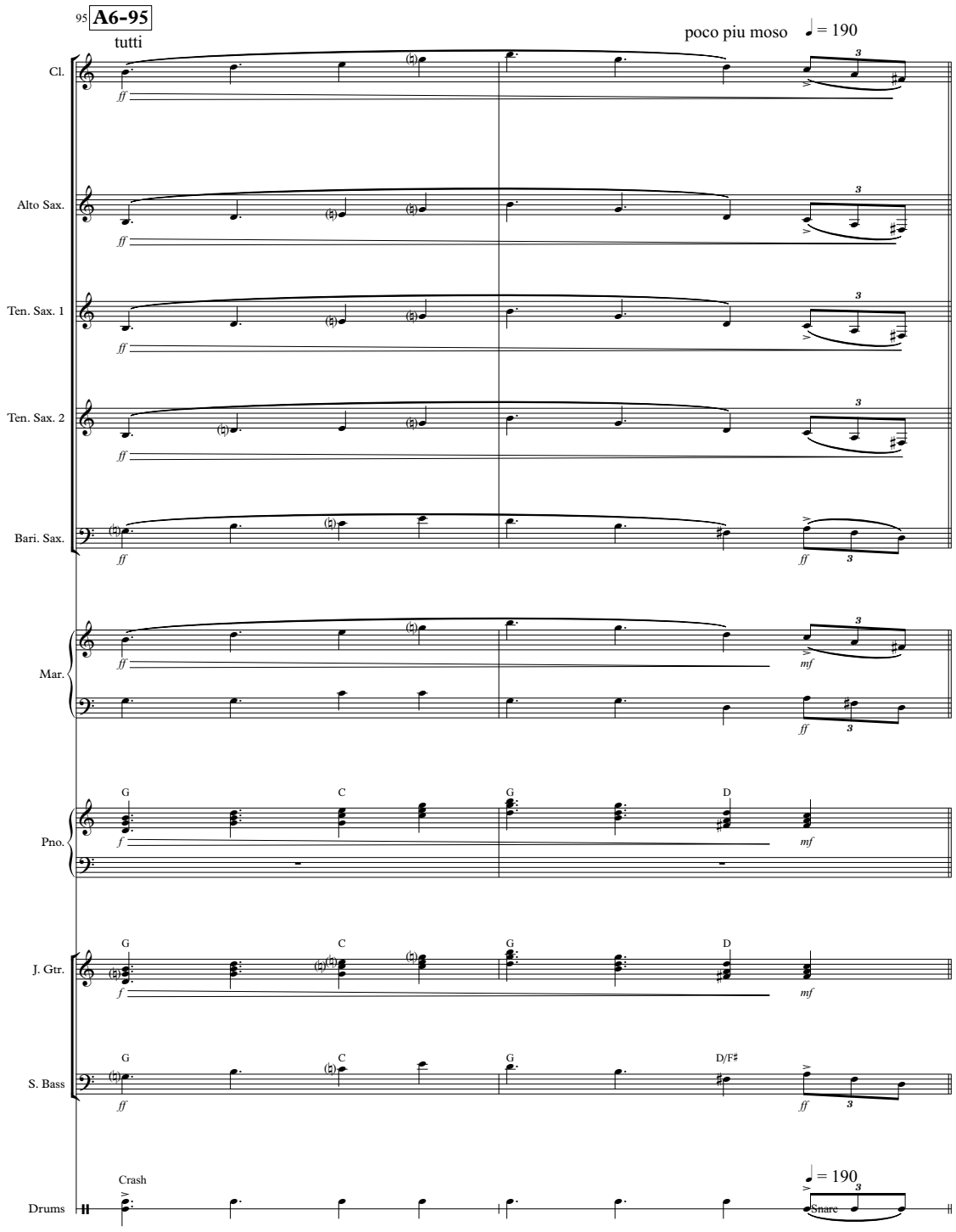

75
75
resolve
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
Em
D/F♯
G
Em
D/F♯
G

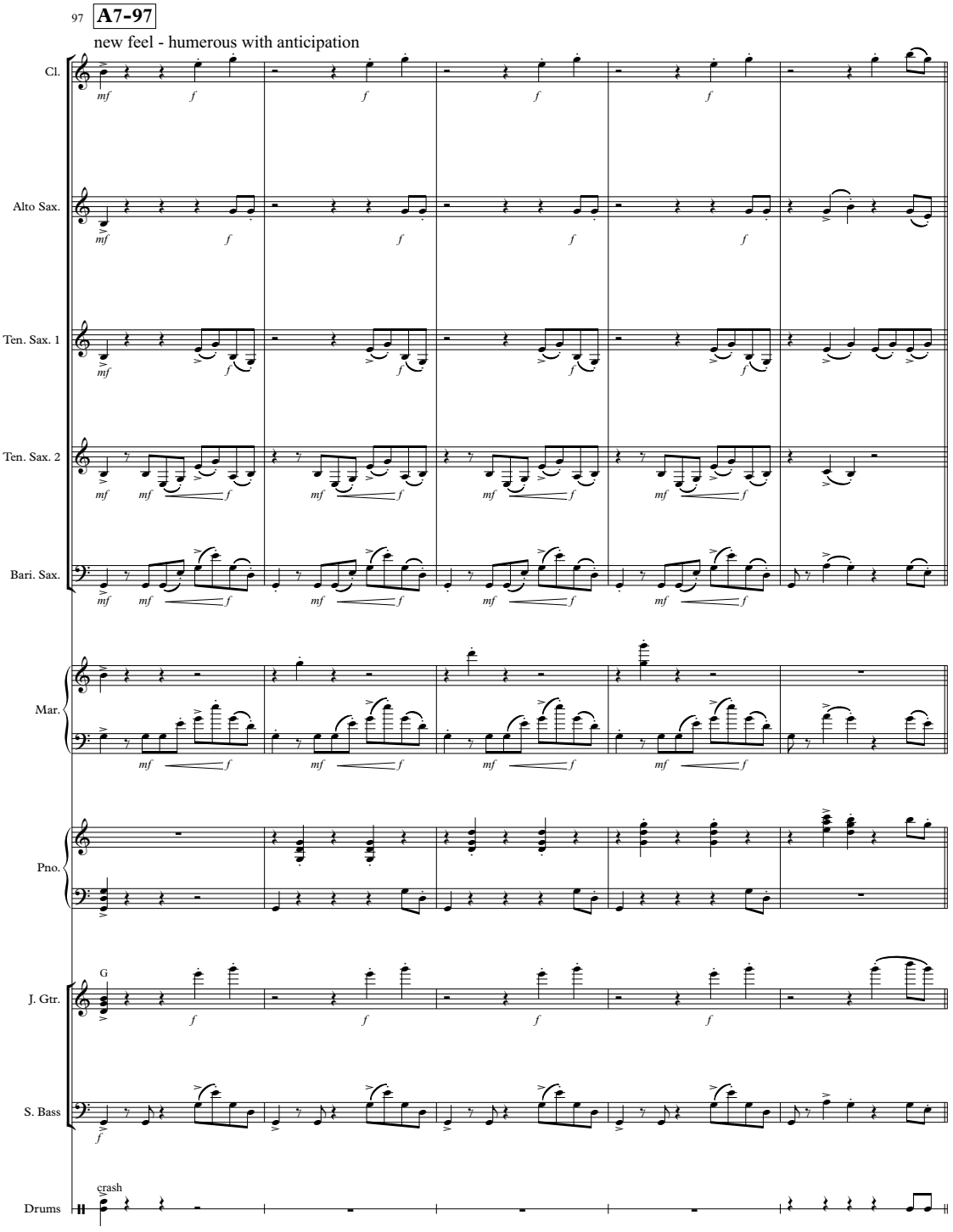

79
79
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
pp
f
G
Em
D
C

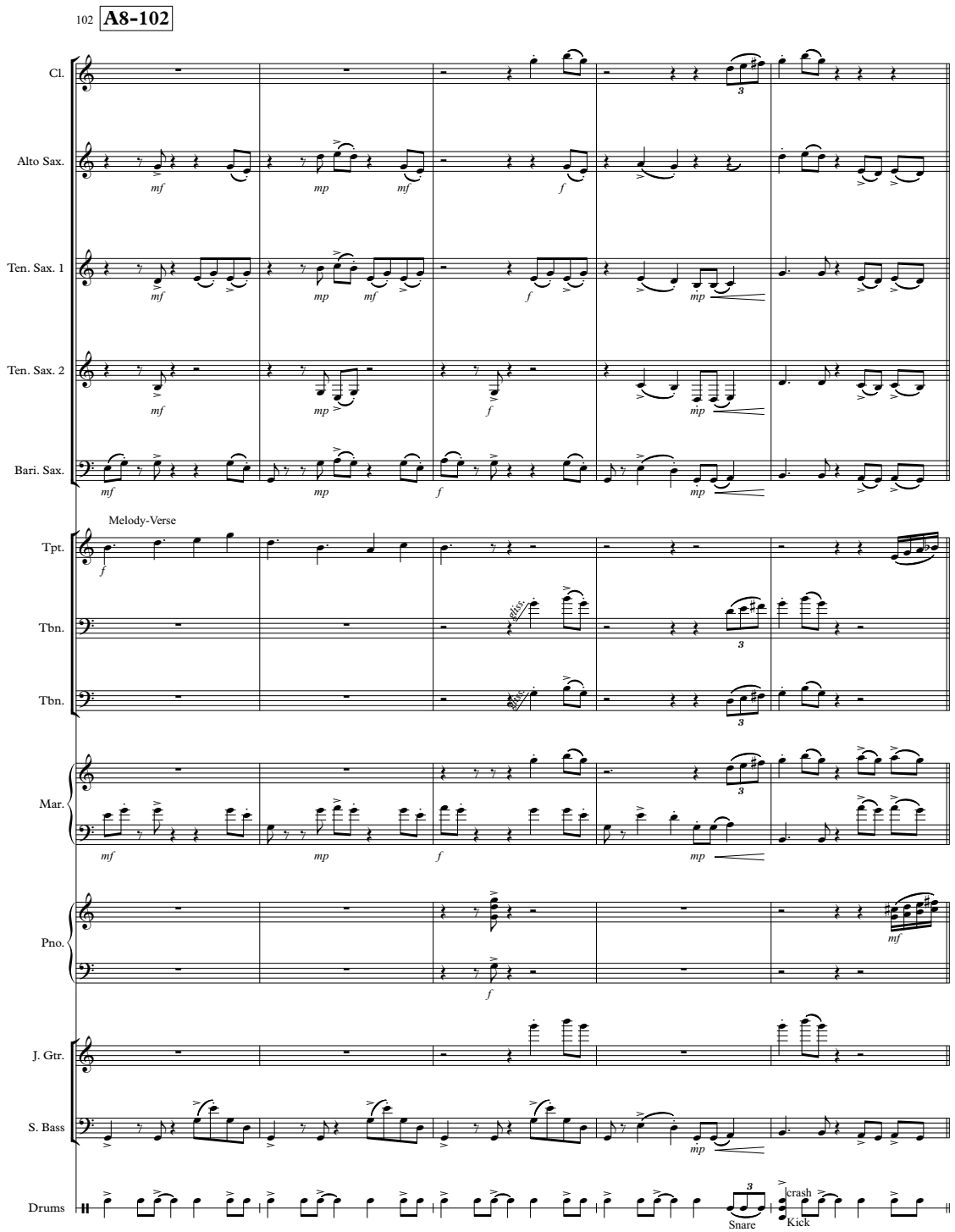

83
A5-83
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
D solo-lyrical
G♯
J. Gtr.
S. Bass
Drums
D
G6
Dmaj7
D6
A
G♯7
C♯

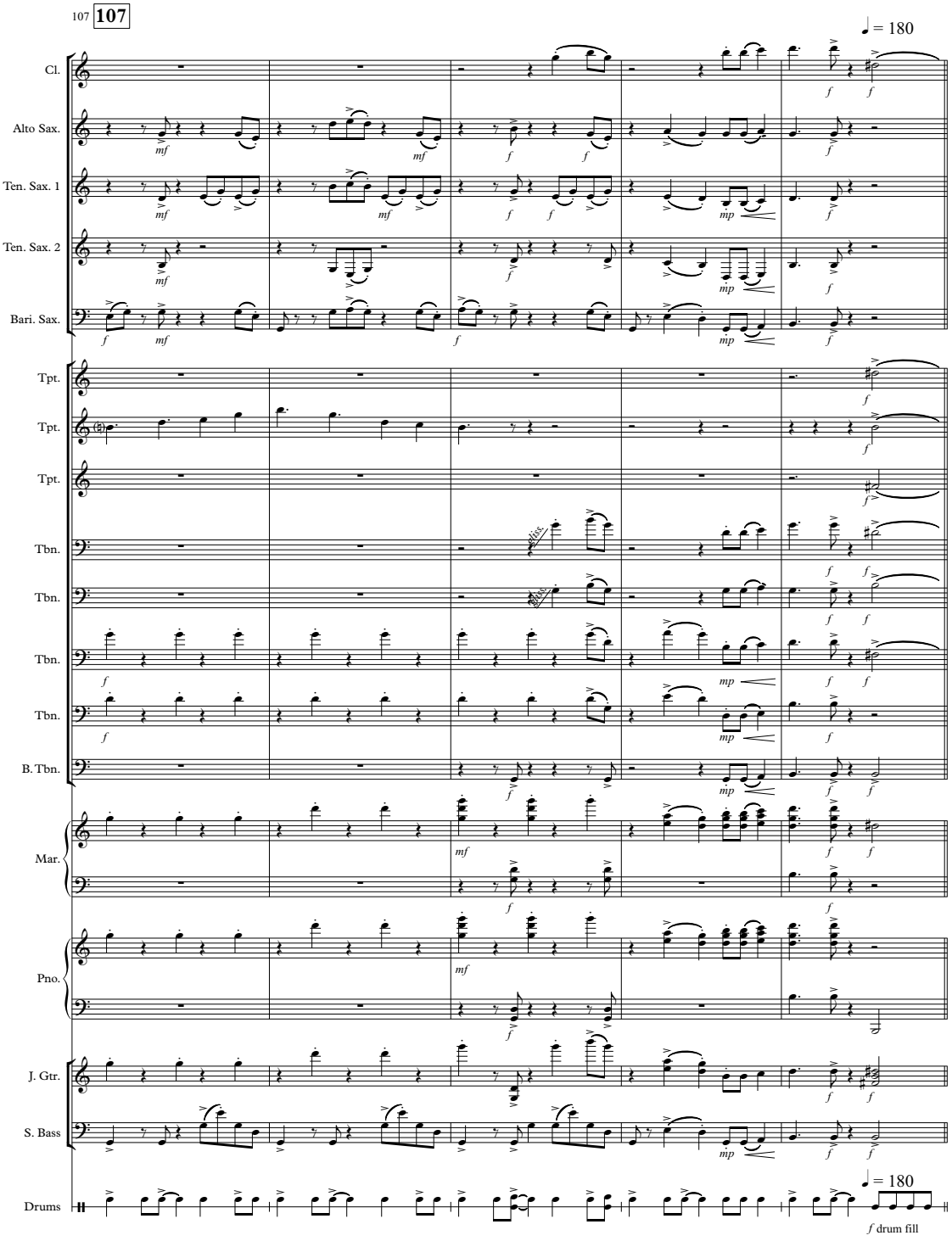

87
87
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
C
E
F/E
C
F
E
C
F
G
Am
F
E
B/D♯
C♯m
E7alt/B
E7
D
crash

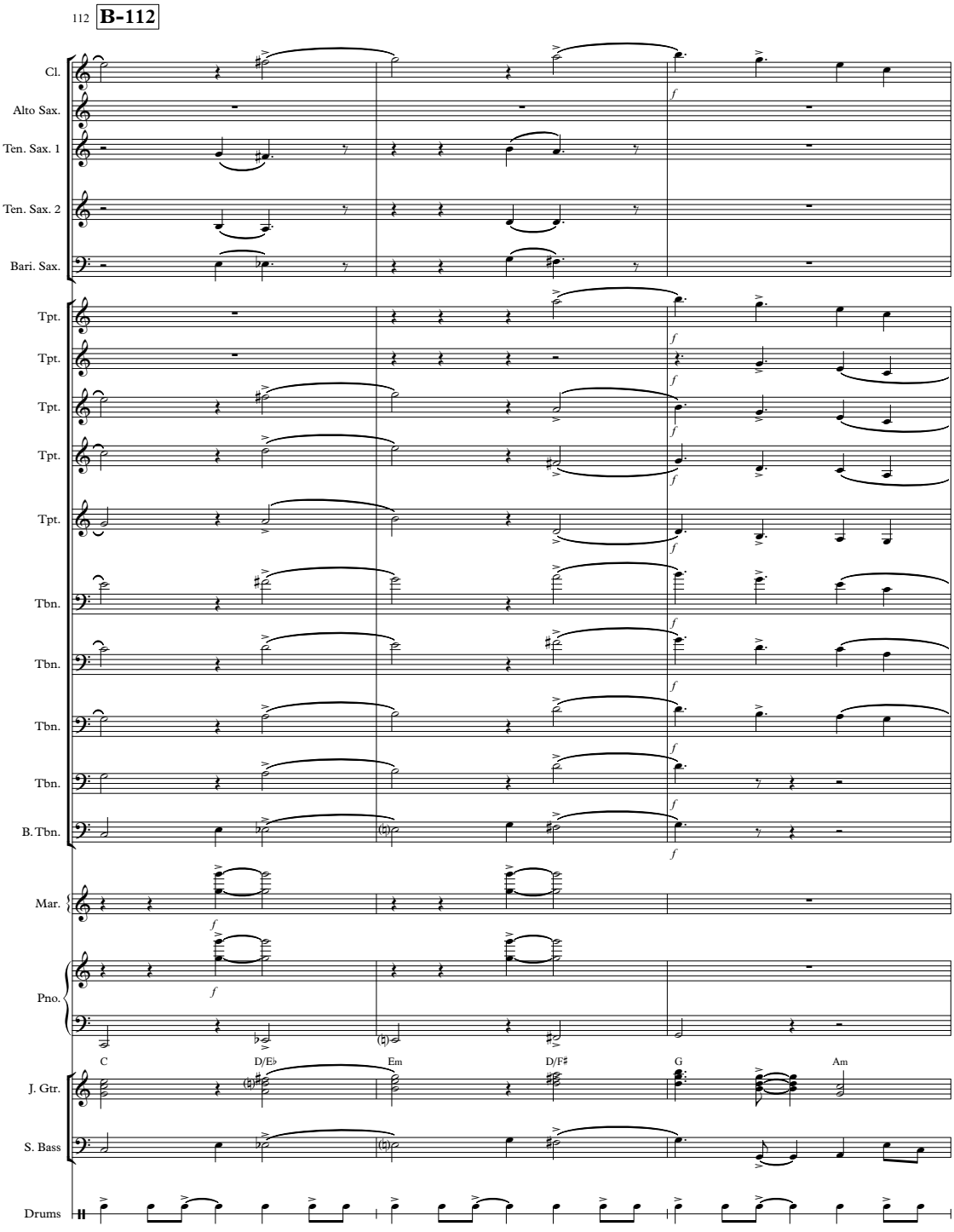

91
91
poco piu moso
♩ = 180
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
A
B
J. Gtr.
A
B
S. Bass
A^maj7
Bm^7
A/C♯
D
E
A
A^maj9
F♯+
B
E
F♯6
B
Drums
♩ = 180
f
mf
p

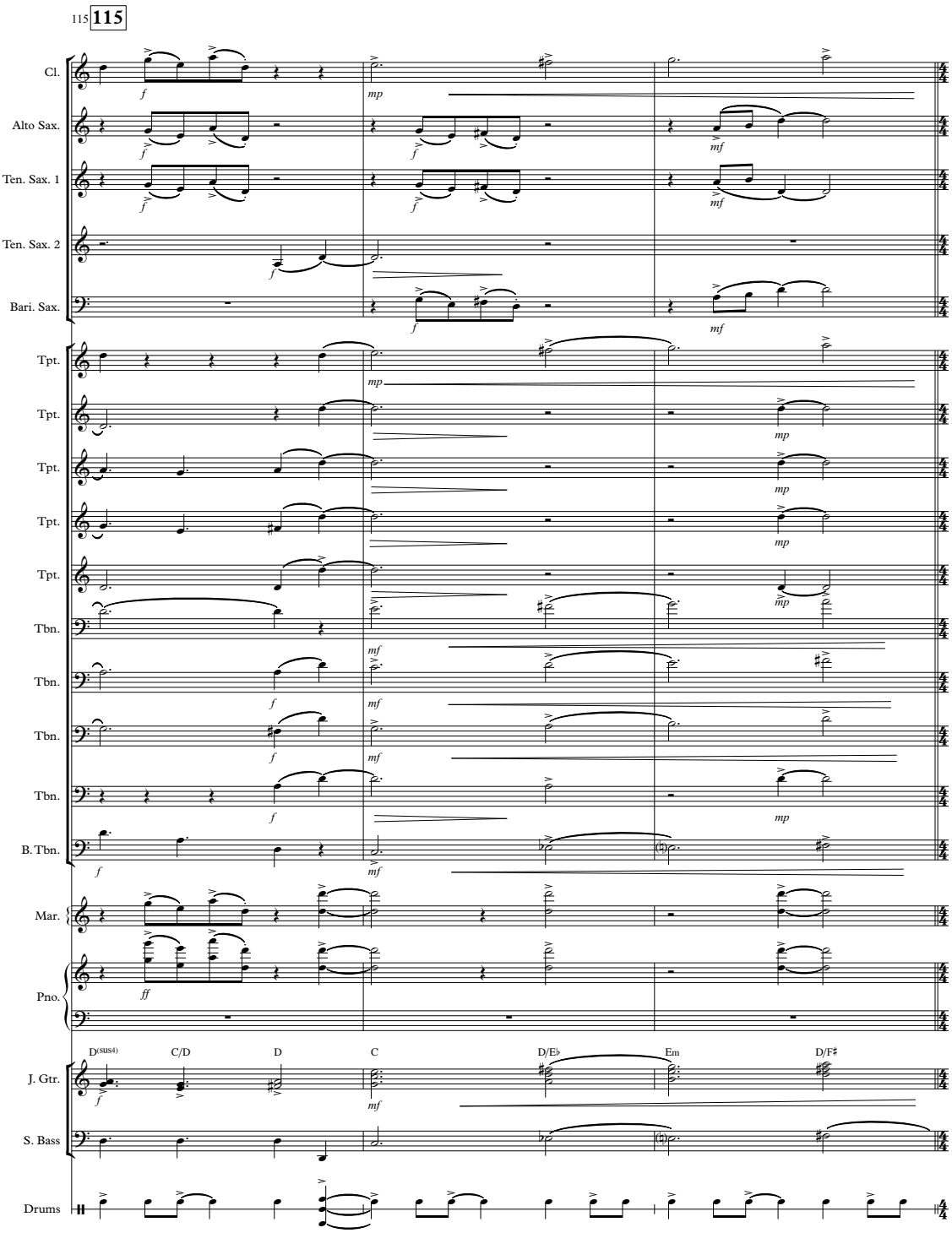

95
A6-95
tutti
poco piu moso
♩ = 190
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
G
C
G
D
D/F♯
Crash
Snare
ff
mf
f

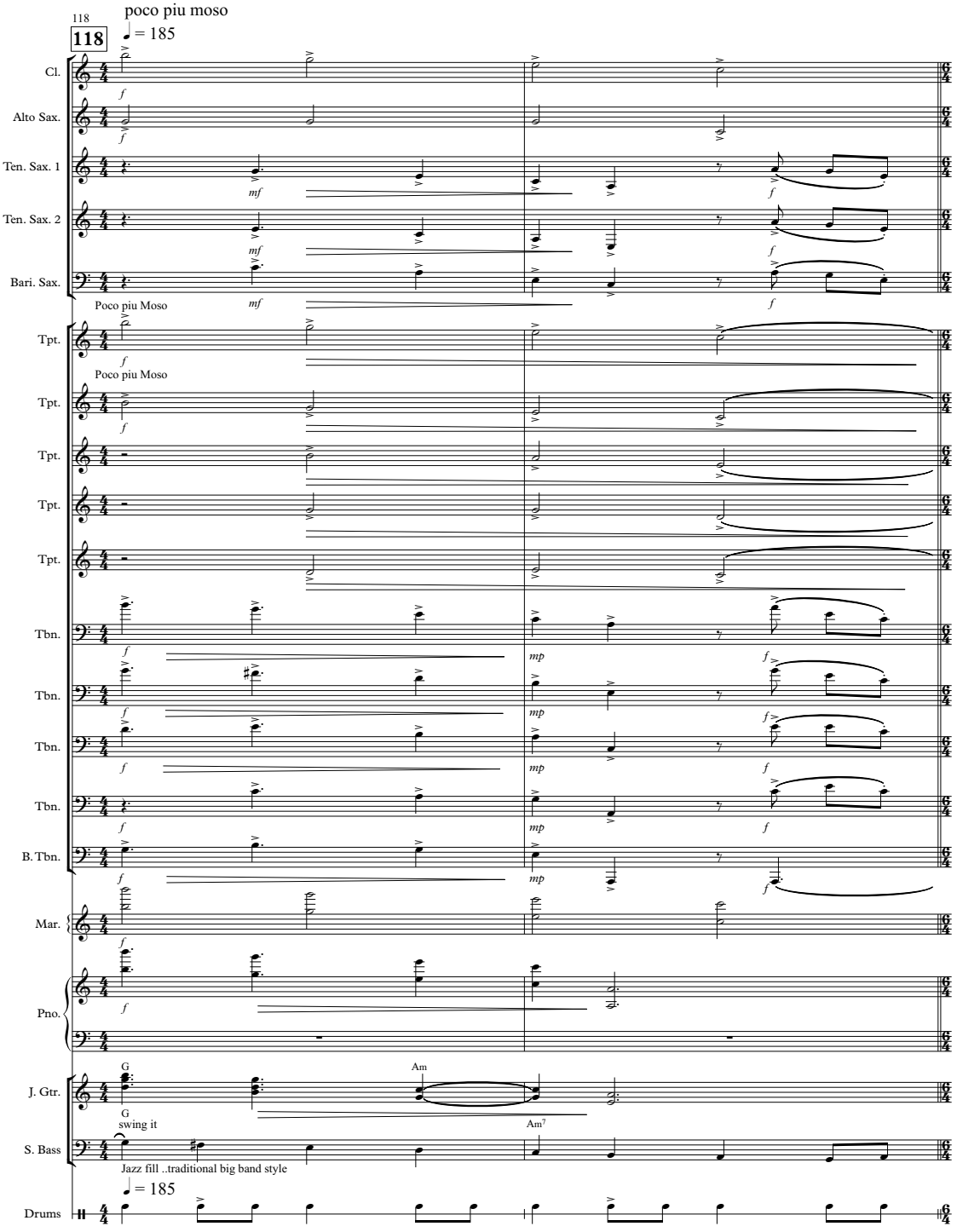

97
A7-97
new feel - humerous with anticipation
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Mar.
Pno.
G
J. Gtr.
S. Bass
crash
Drums

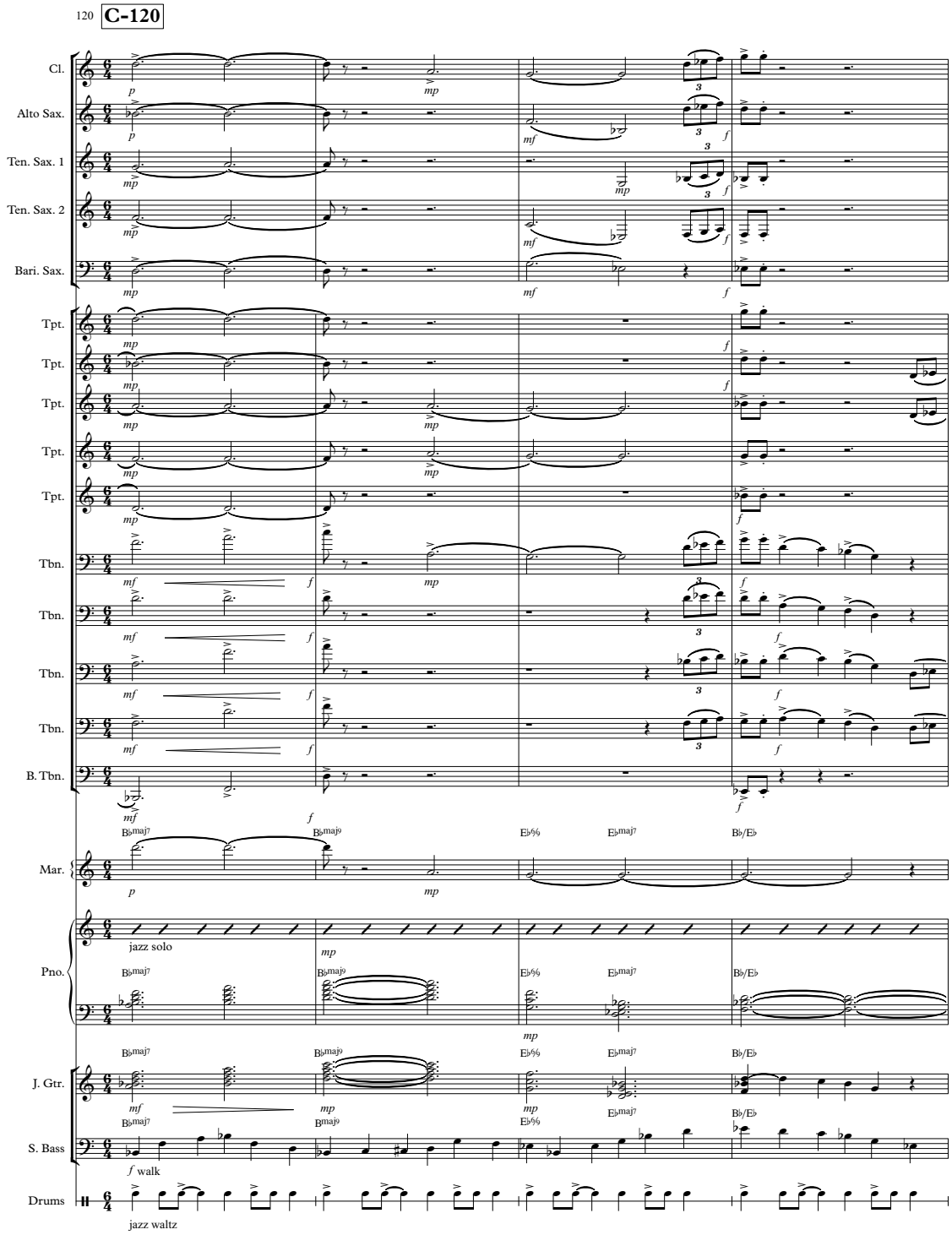

102
A8-102
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Melody-Verse
Tpt.
Tbn.
Tbn.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
glissando
Snare
crash
Kick

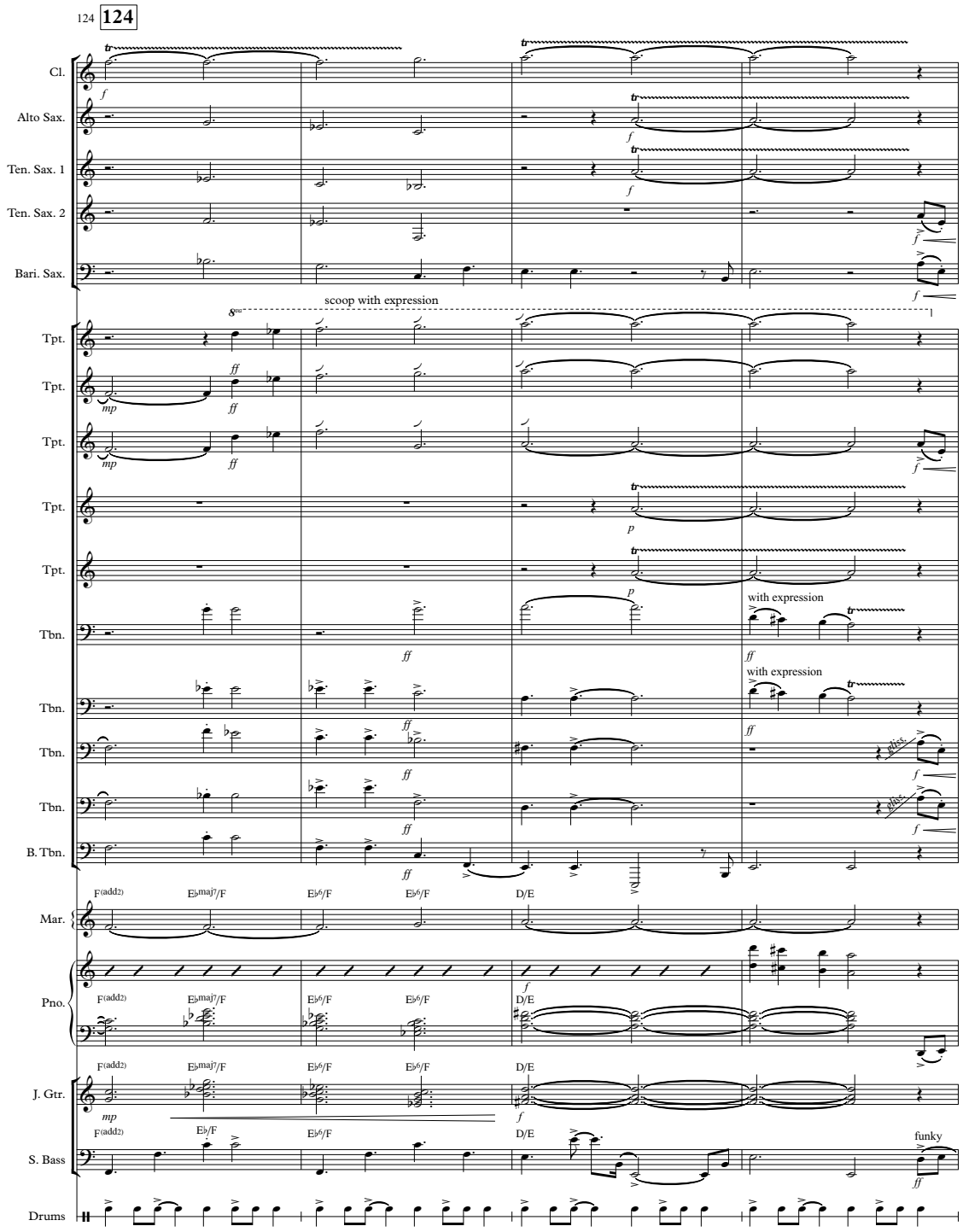

107
107
♩ = 180
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
♩ = 180
f drum fill

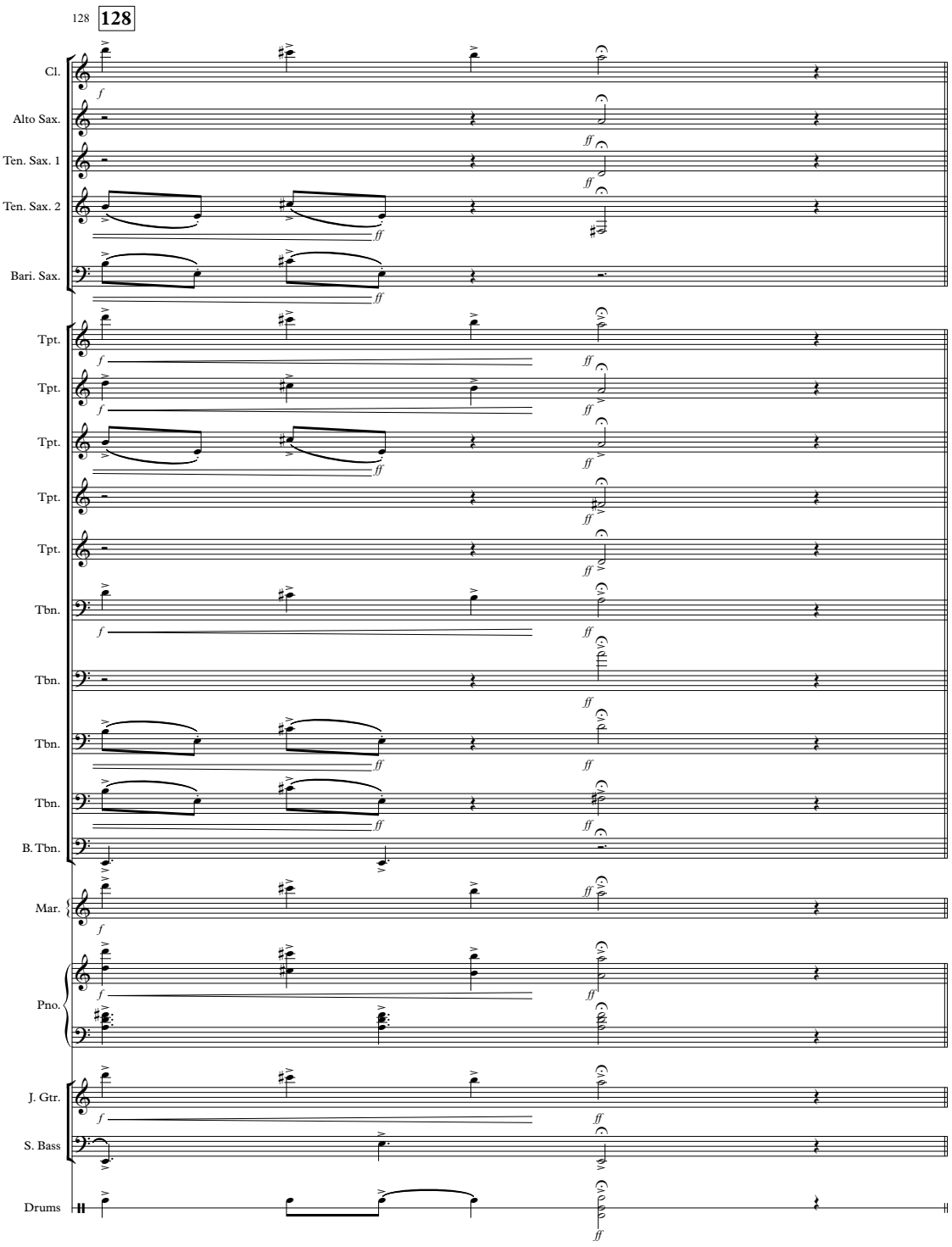

112
B-112
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
C
D/E♭
Em
D/F♯
G
Am
J. Gtr.
S. Bass
Drums

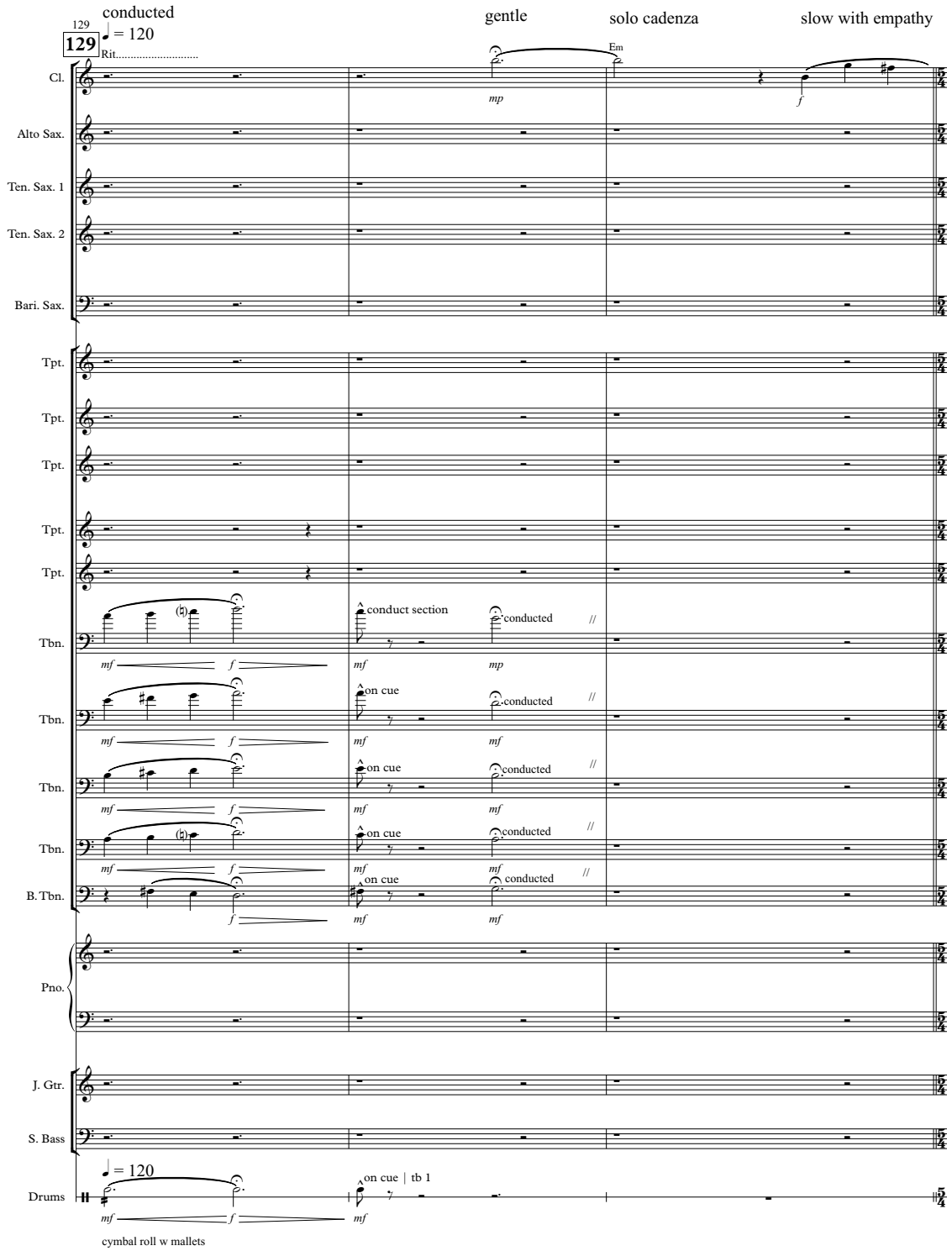

115
115
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
D(sus4)
C/D
D
C
D/E♭
Em
D/F♯

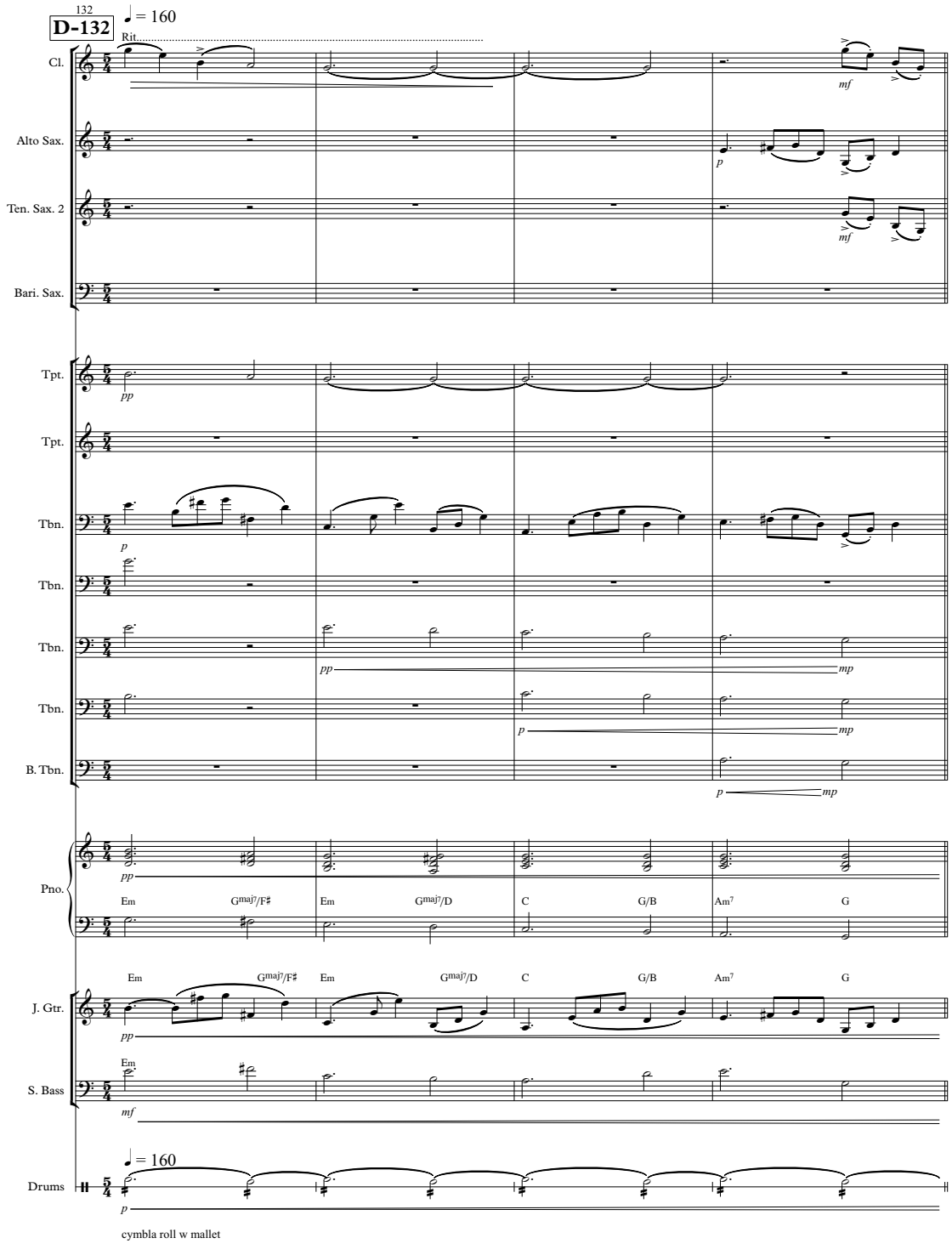

118
poco piu moso
118
♩ = 185
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Poco piu Moso
Tpt.
Poco piu Moso
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
G
Am
G
swing it
Am7
S. Bass
Jazz fill ..traditional big band style
♩ = 185
Drums

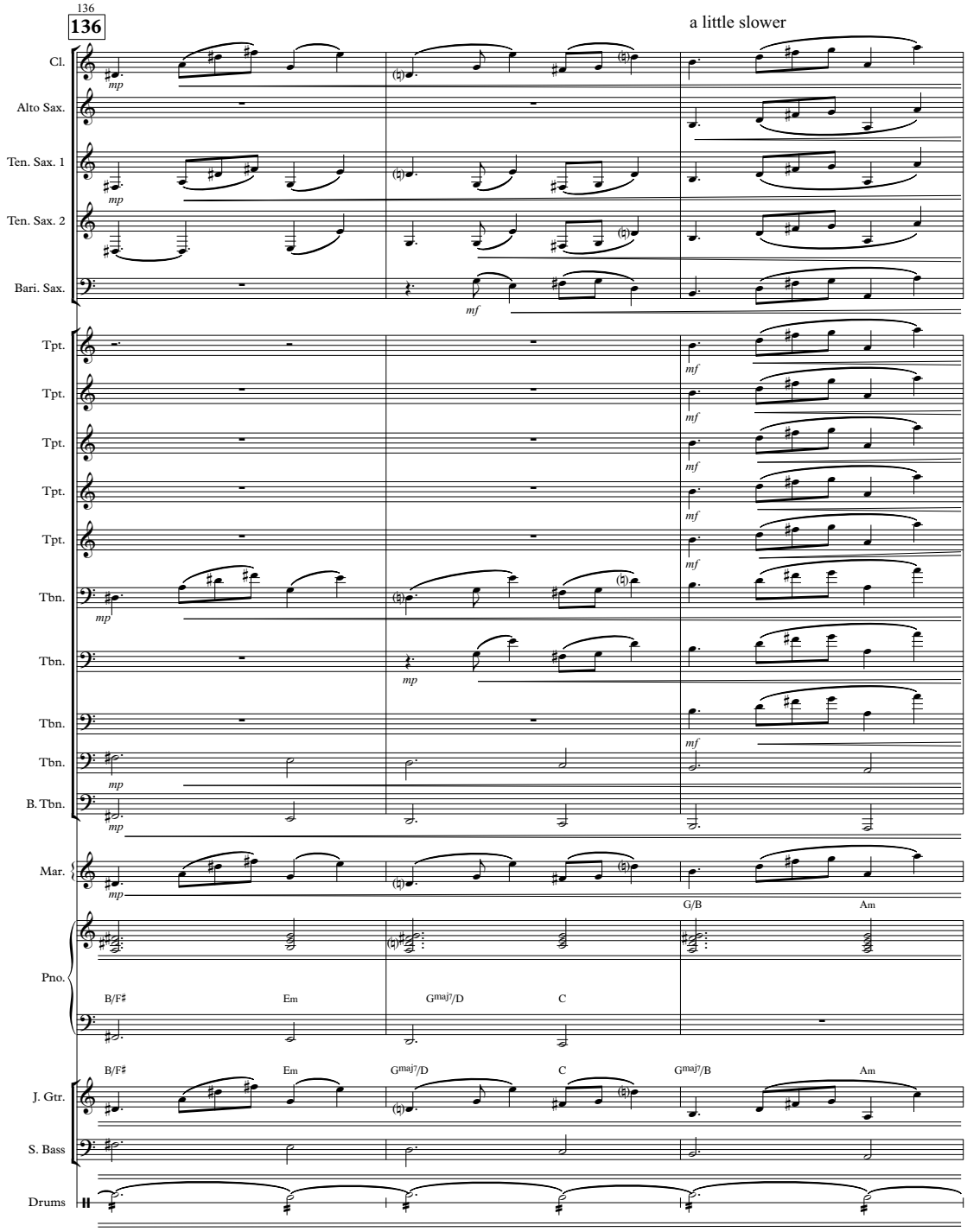

120
C-120
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
jazz solo
jazz waltz
f walk

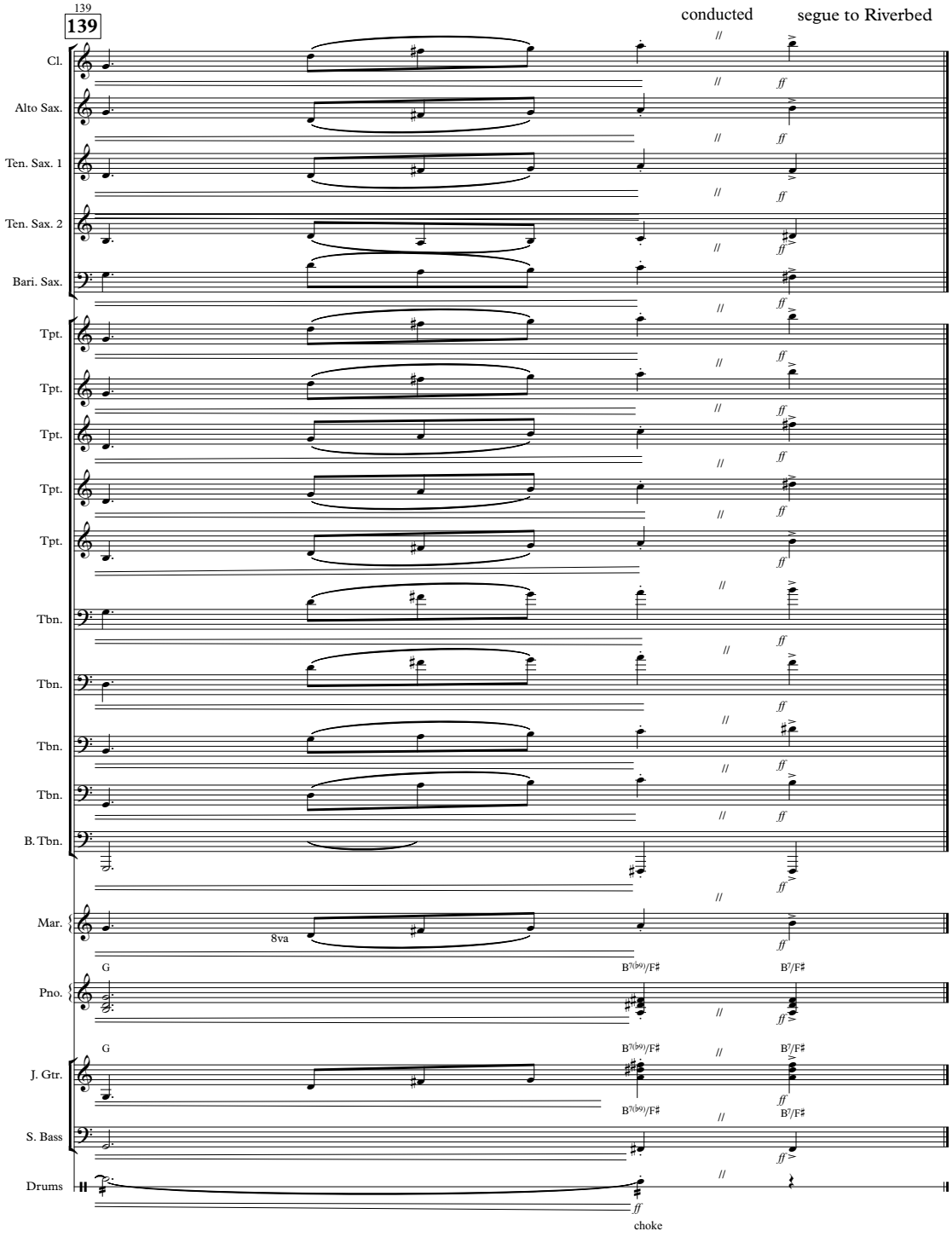

124
124
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
scoop with expression
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
with expression
Tbn.
with expression
Tbn.
Tbn.
B. Tbn.
F(add2)
E♭maj7/F
E♭6/F
E♭6/F
D/E
Mar.
Pno.
J. Gtr.
E♭/F
S. Bass
funky
Drums


128
128
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
S. Bass
Drums


conducted
gentle
solo cadenza
slow with empathy
129
129
♩ = 120
Rit.
Em
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
conduct section
conducted
on cue
Pno.
J. Gtr.
S. Bass
Drums
♩ = 120
on cue | tb 1
cymbal roll w mallets


132
D-132
♩ = 160
Rit.
Cl.
Alto Sax.
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Pno.
J. Gtr.
S. Bass
Drums
♩ = 160
Em
Gmaj7/F♯
Em
Gmaj7/D
C
G/B
Am7
G
cymbla roll w mallet


136
136
a little slower
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
Pno.
J. Gtr.
S. Bass
Drums
mp
mf
G/B
Am
B/F♯
Em
Gmaj7/D
C
Gmaj7/B


139
139
conducted
segue to Riverbed
Cl.
Alto Sax.
Ten. Sax. 1
Ten. Sax. 2
Bari. Sax.
Tpt.
Tpt.
Tpt.
Tpt.
Tpt.
Tbn.
Tbn.
Tbn.
Tbn.
B. Tbn.
Mar.
8va
Pno.
J. Gtr.
S. Bass
Drums
G
B7(b9)/F♯
B7/F♯
choke

HUMANASONICS

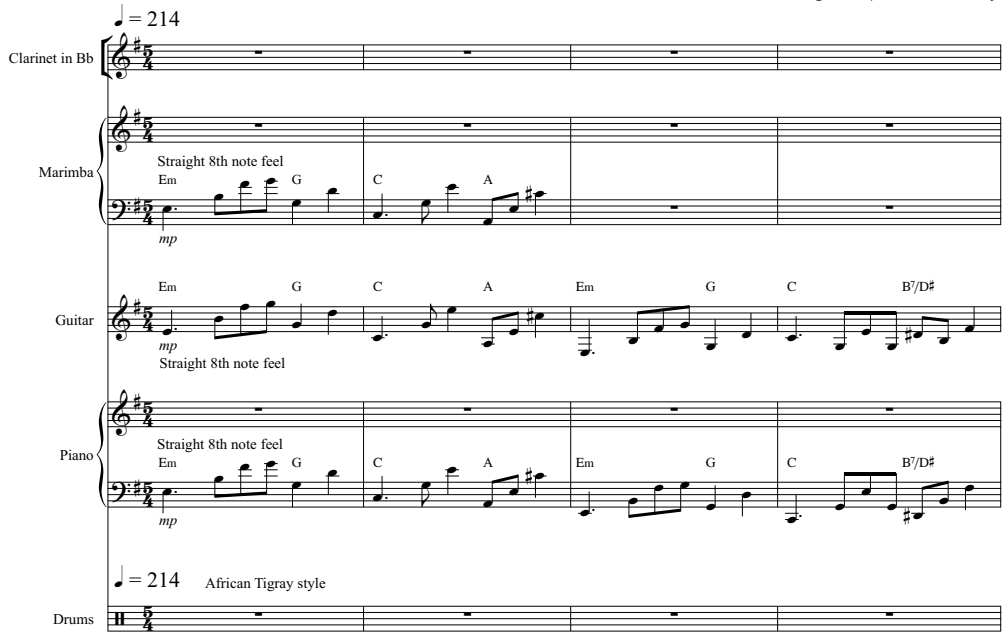
Movement III

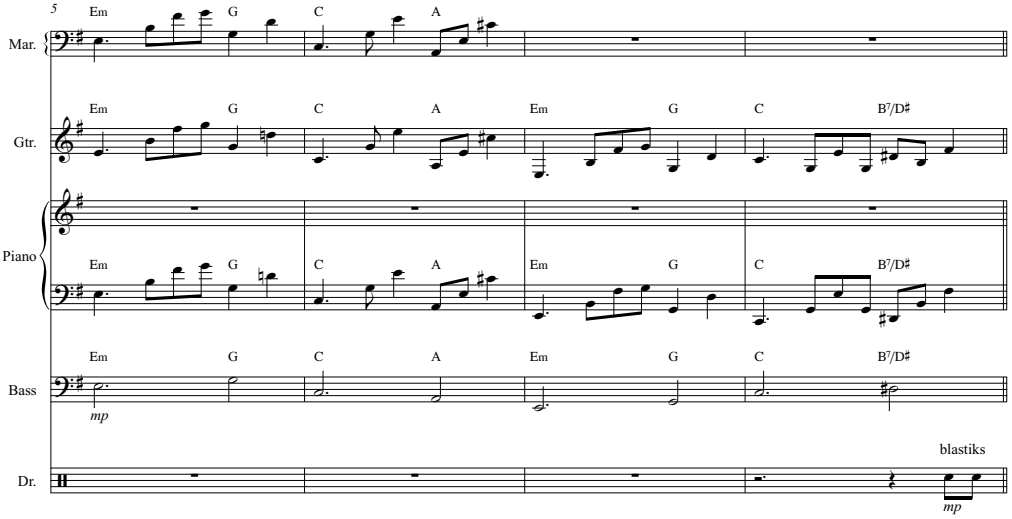
Riverbed

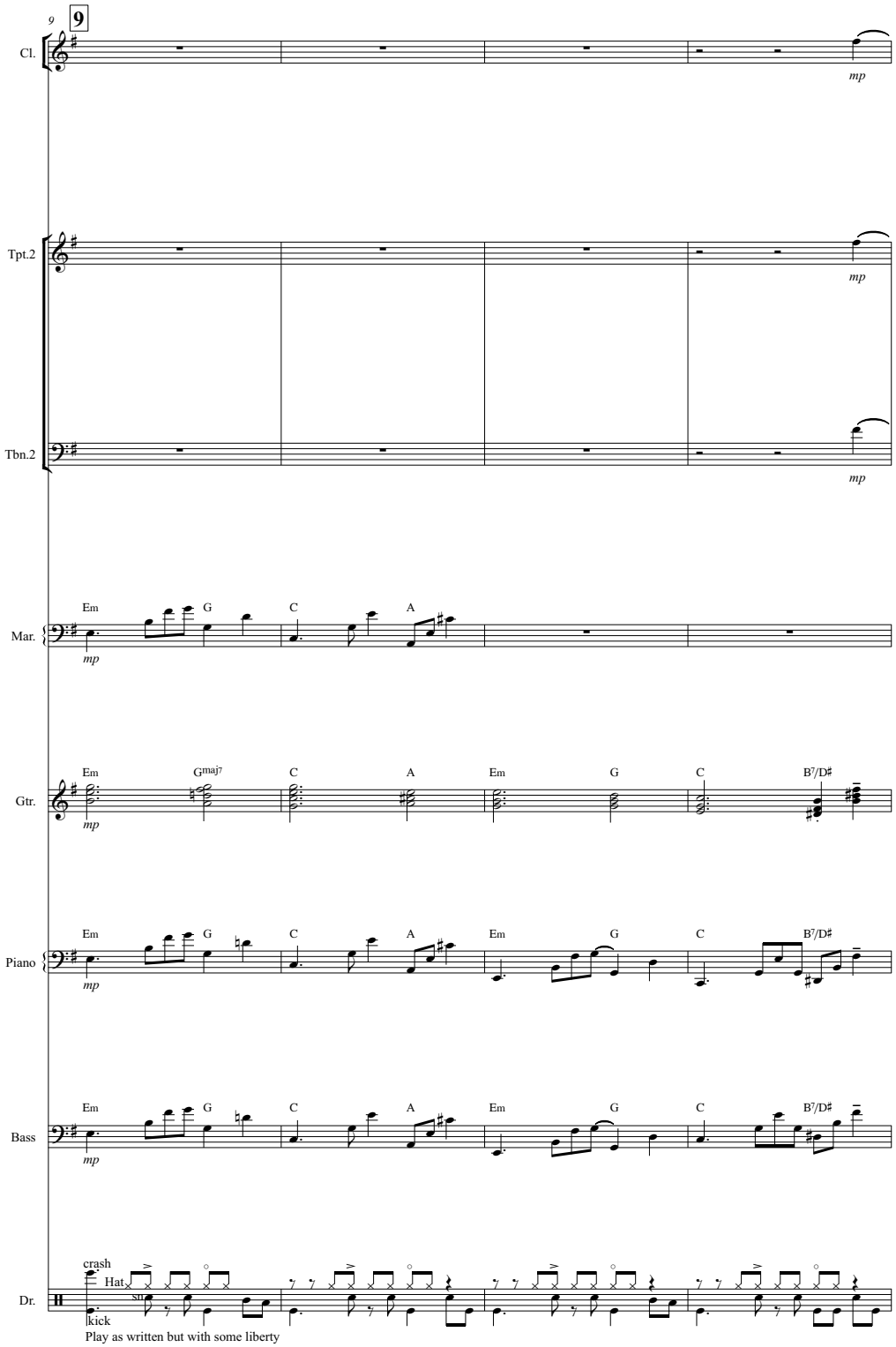
(Water)

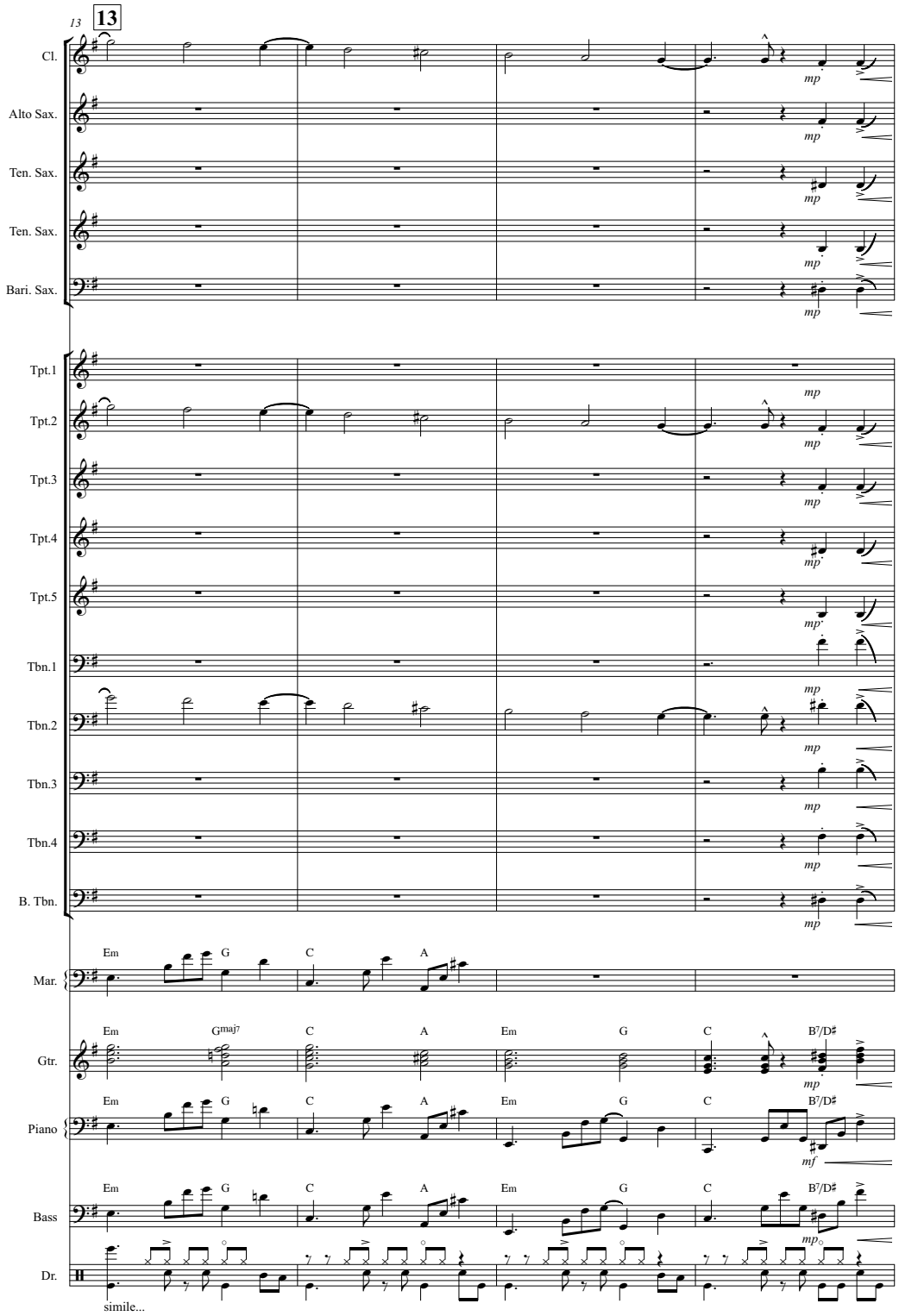
African Tigray
Nile Delta-Ethiopian/Eritrean Jazz

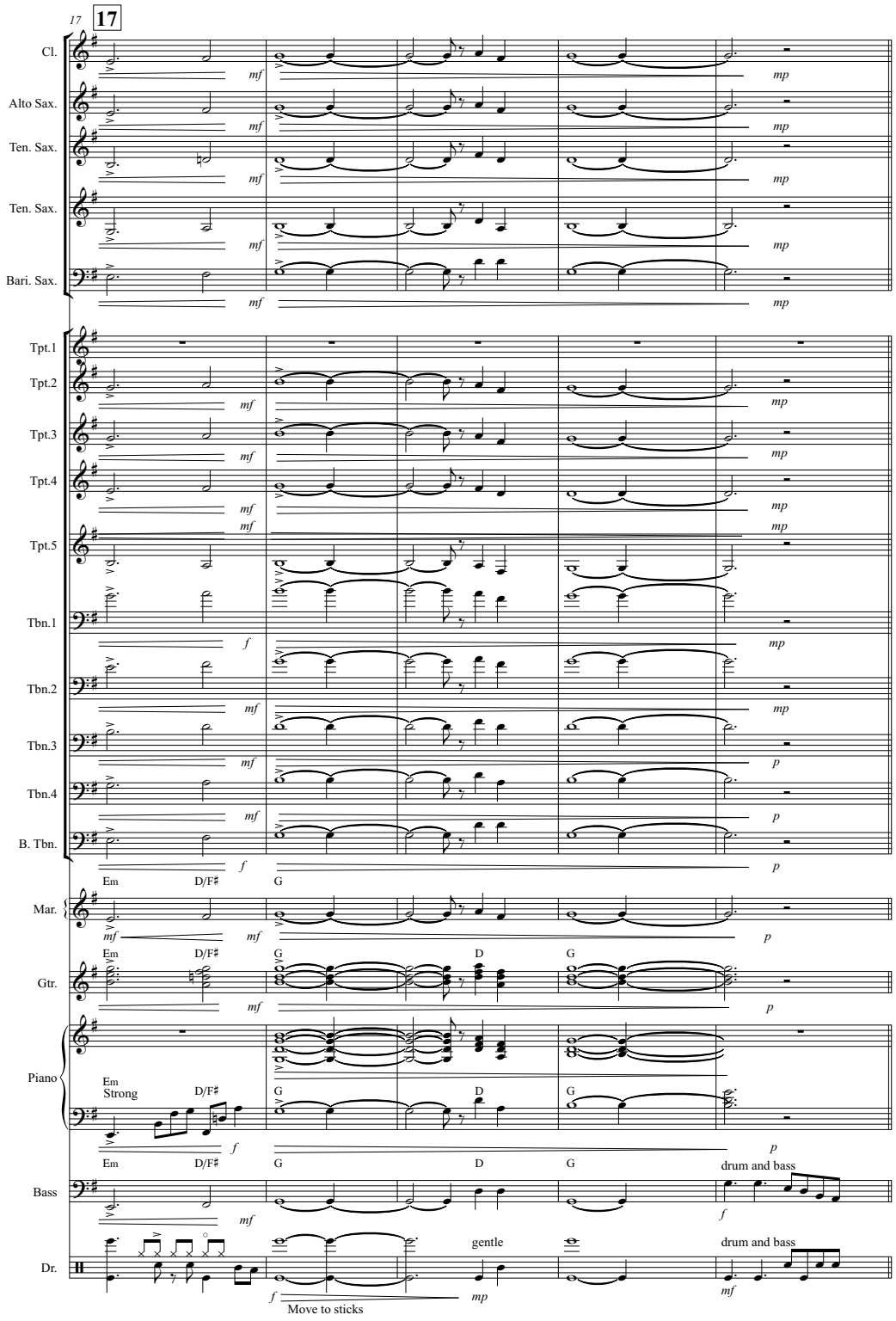
Composer | Paul Novotny

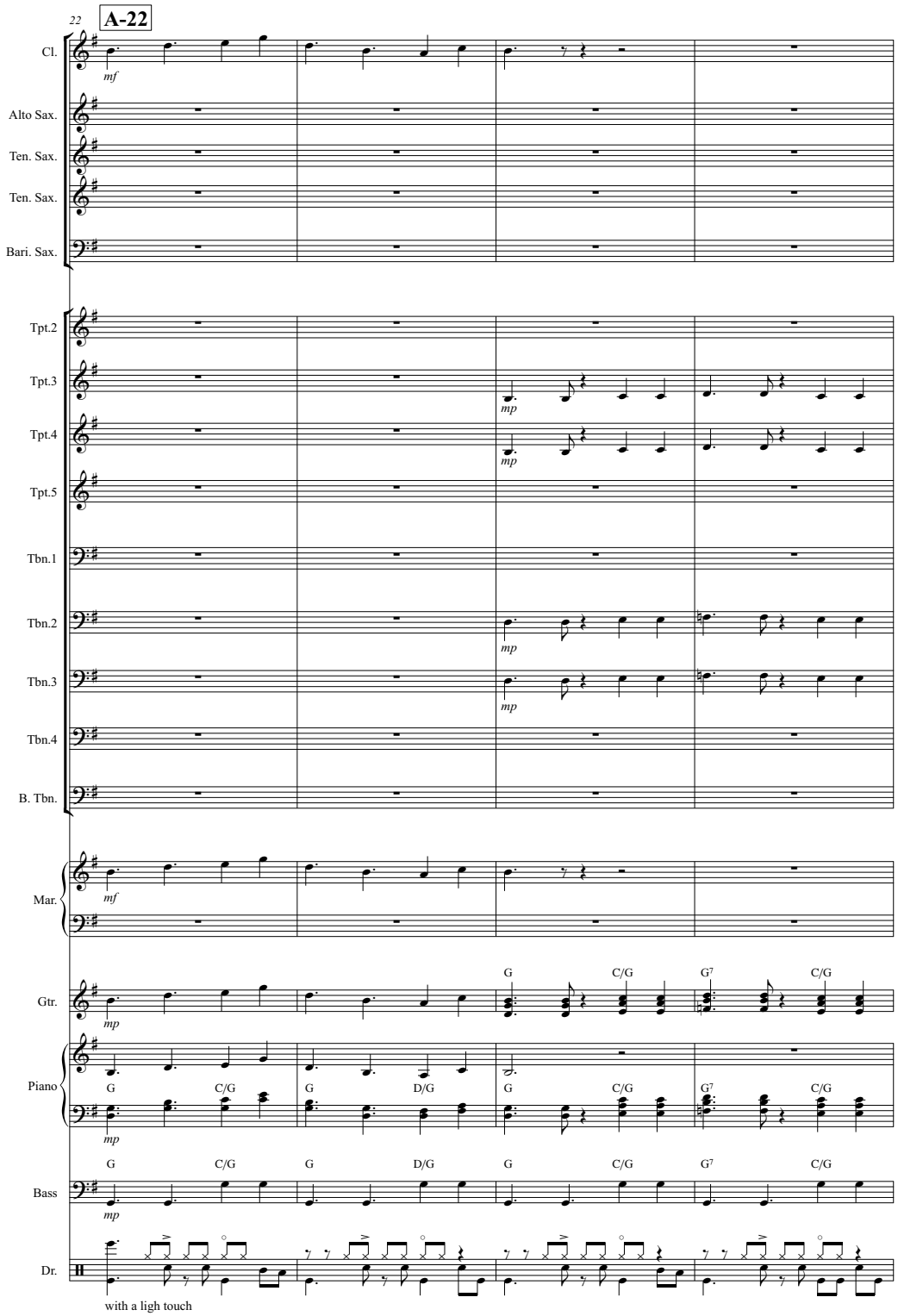


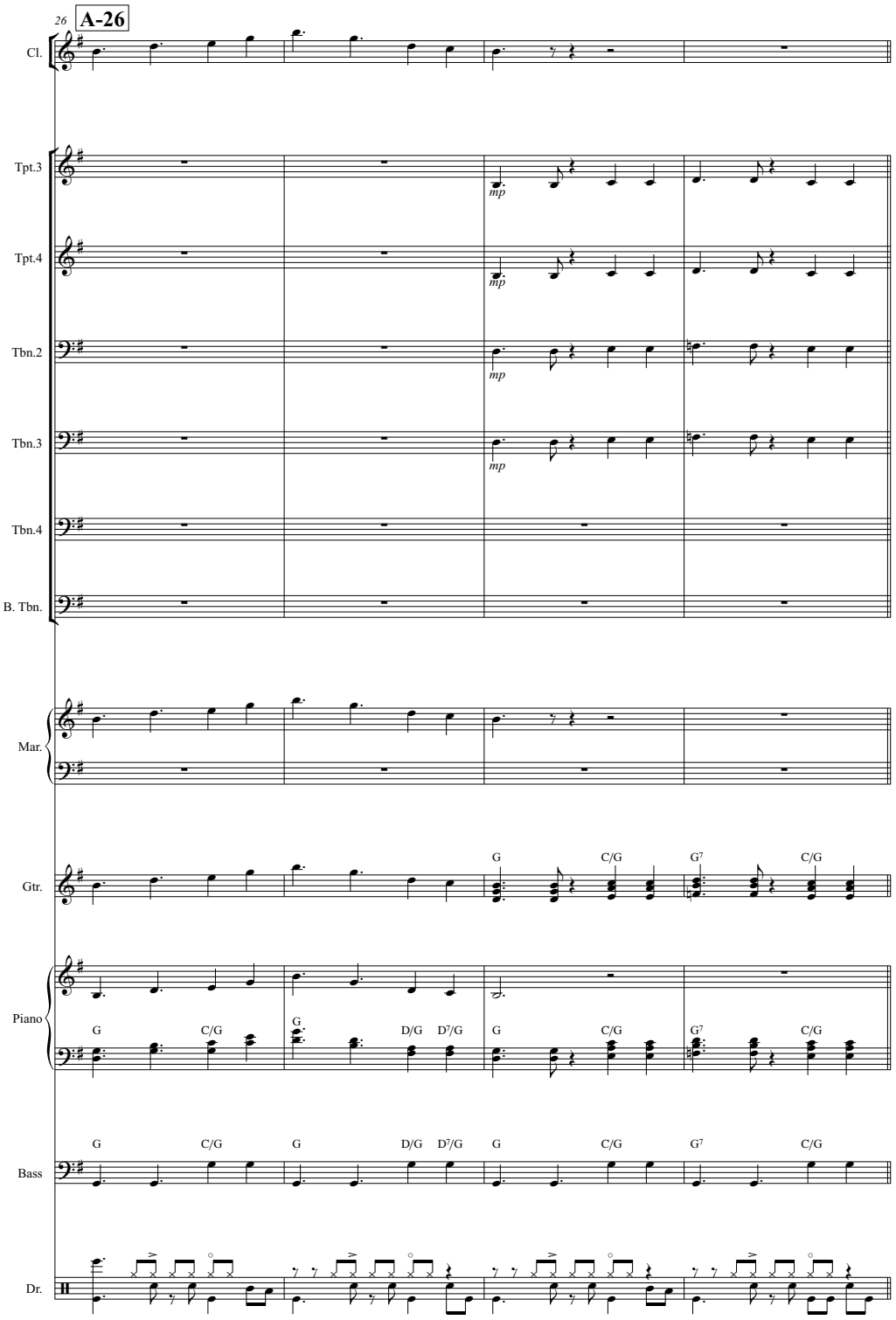


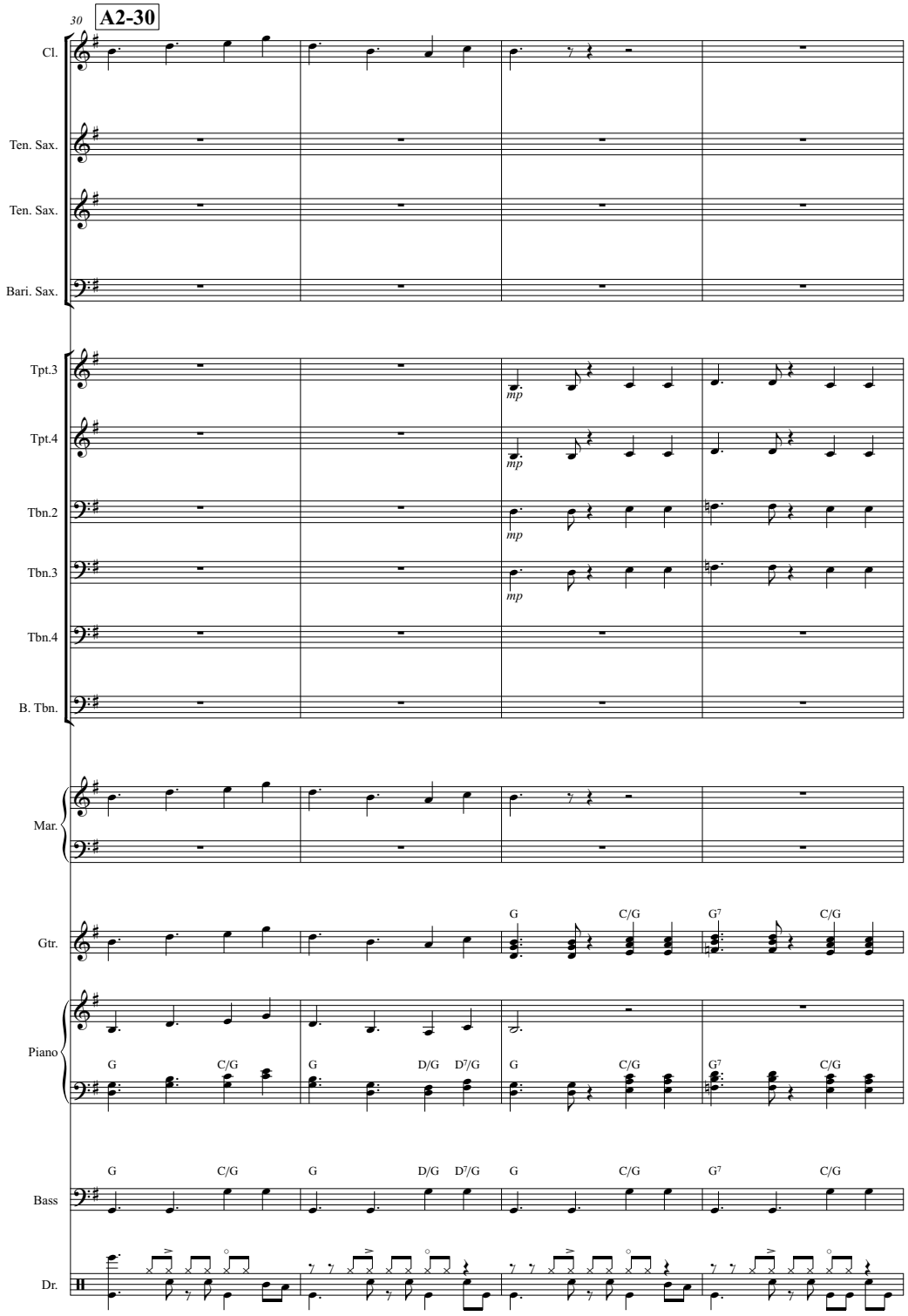

9
9
Cl.
mp
Tpt.2
mp
Tbn.2
mp
Mar.
Em
G
C
A
mp
Gtr.
Em
Gmaj7
C
A
Em
G
C
B7/D♯
mp
Piano
Em
G
C
A
Em
G
C
B7/D♯
mp
Bass
Em
G
C
A
Em
G
C
B7/D♯
mp
Dr.
crash
Hat
kick
Play as written but with some liberty

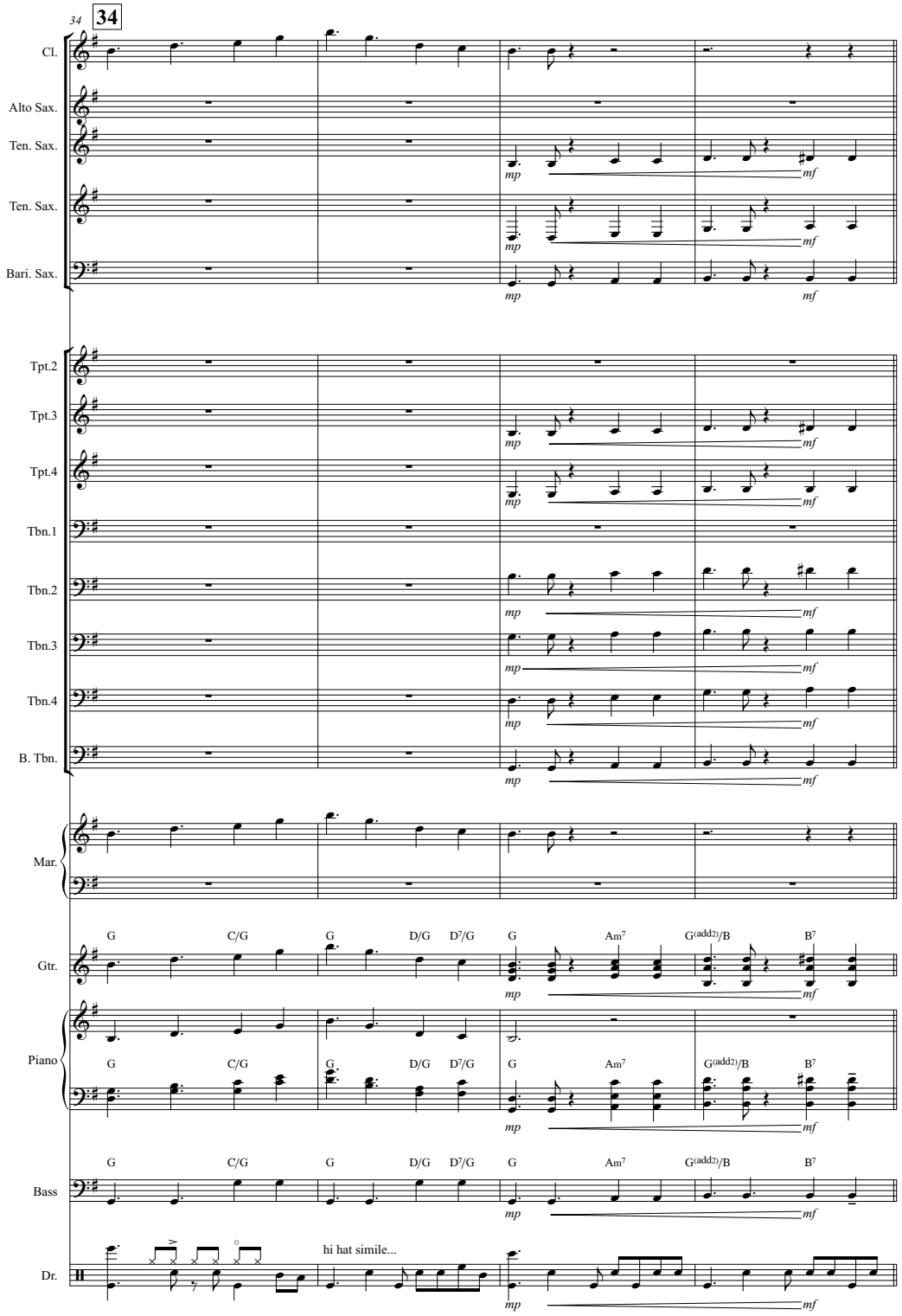

13
13
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
mf
Em
G
C
A
Gmaj7
B7/D♯
simile...

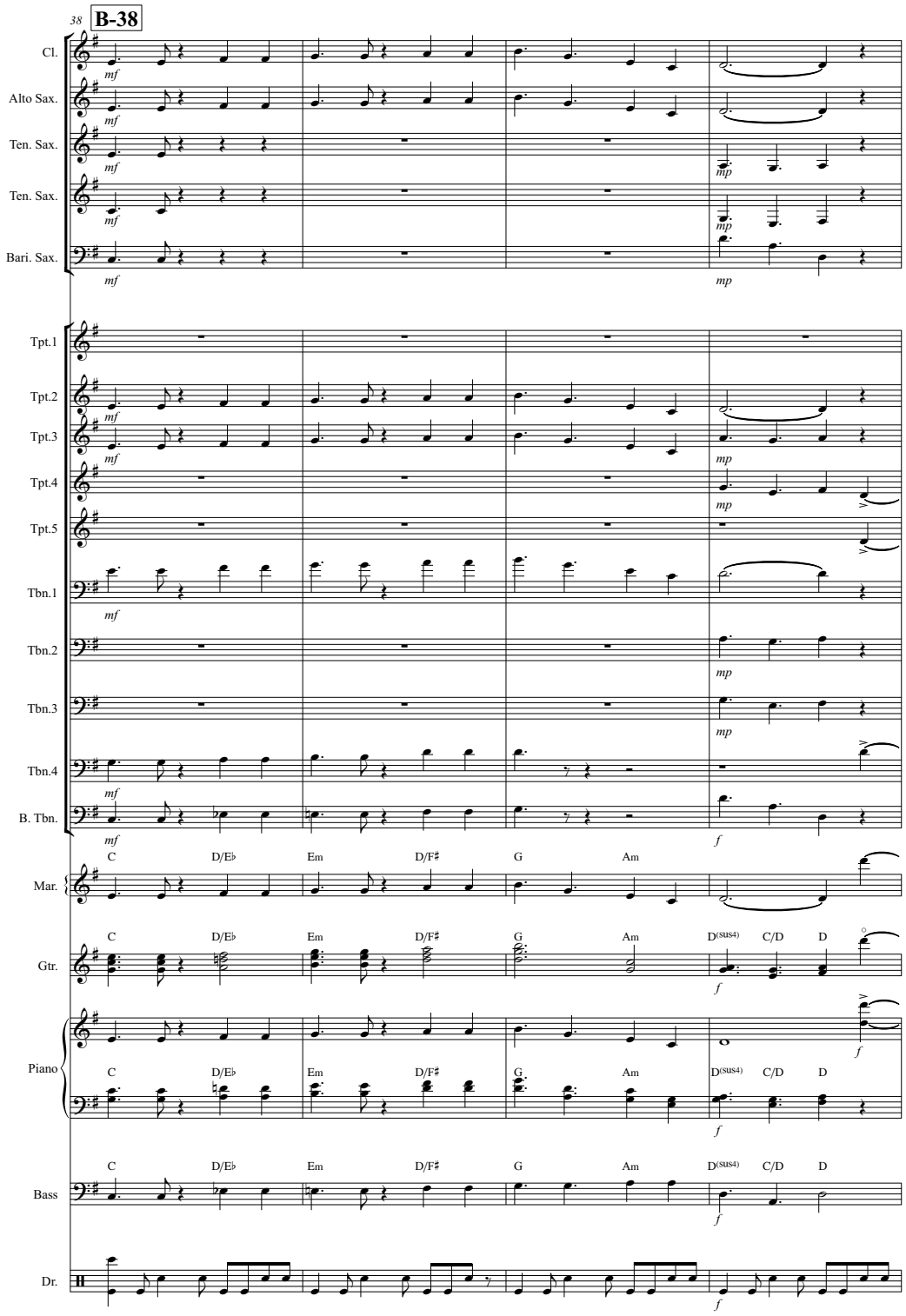

17
17
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Em
D/F♯
G
Mar.
D
Gtr.
Piano
Strong
Bass
Dr.
drum and bass
gentle
Move to sticks

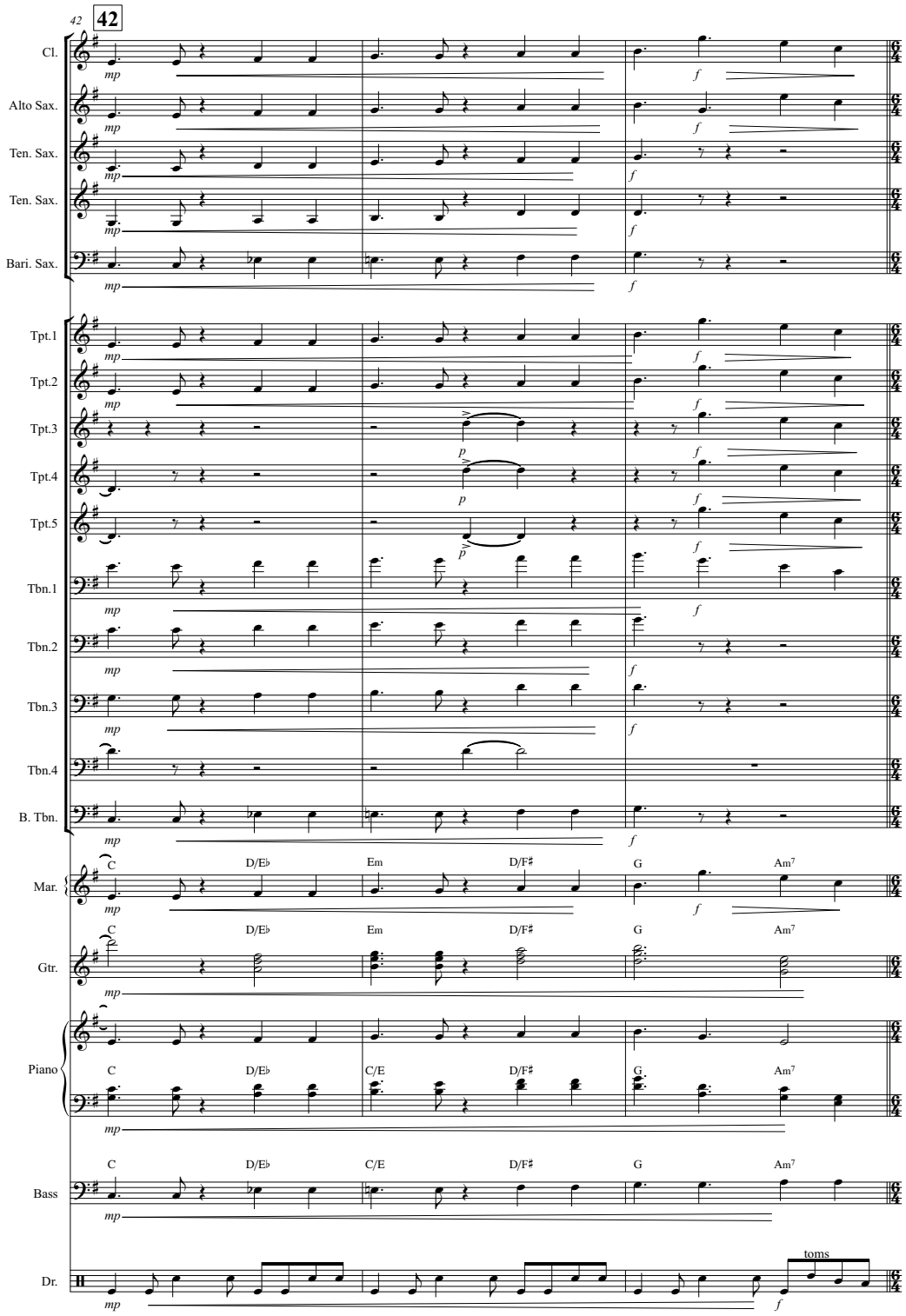

22
A-22
Cl.
mf
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.2
Tpt.3
mp
Tpt.4
mp
Tpt.5
Tbn.1
Tbn.2
mp
Tbn.3
mp
Tbn.4
B. Tbn.
Mar.
mf
Gtr.
mp
G
C/G
G7
C/G
Piano
mp
G
C/G
G
D/G
G
C/G
G7
C/G
Bass
mp
G
C/G
G
D/G
G
C/G
G7
C/G
Dr.
with a ligh touch

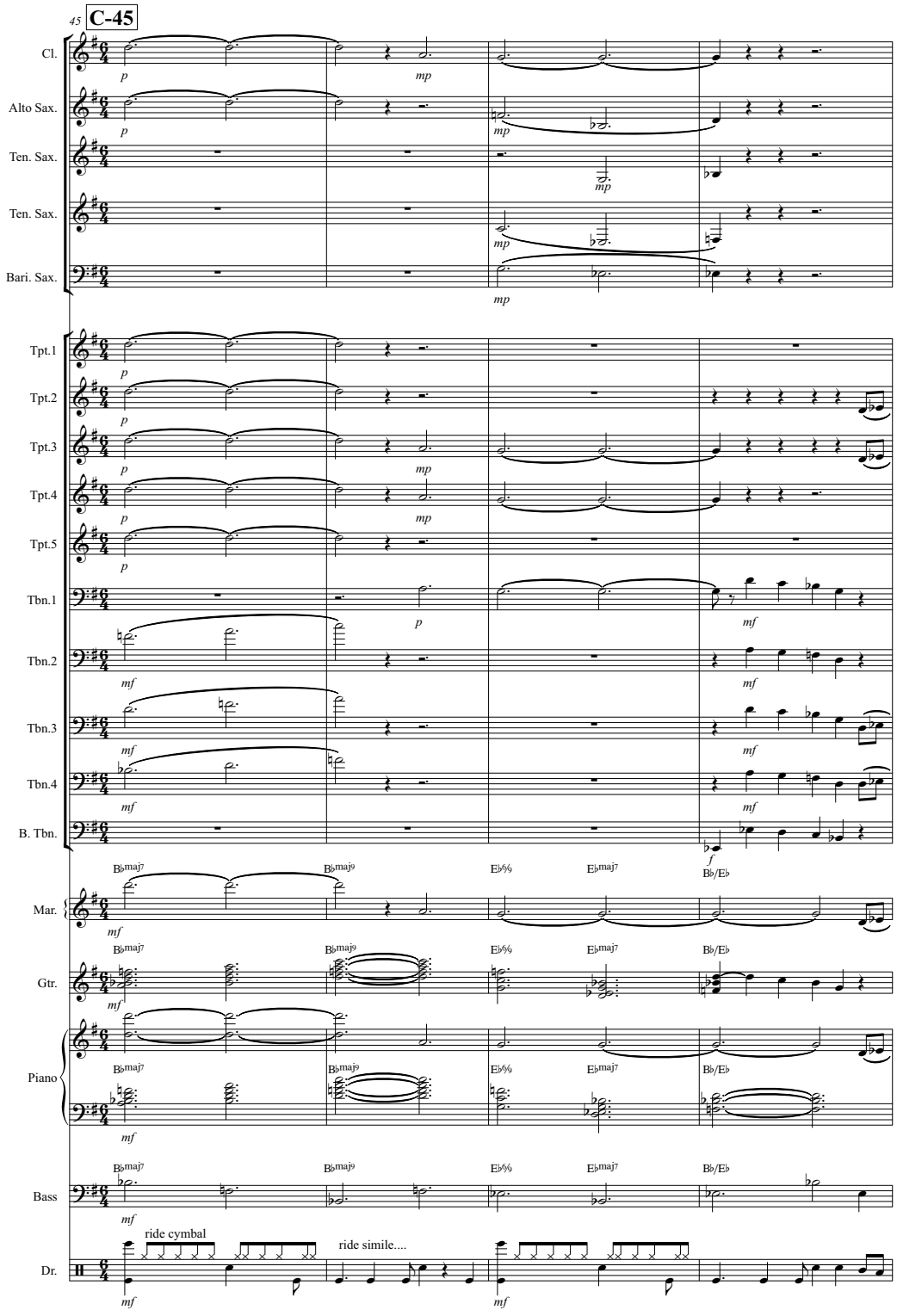

26
A-26
Cl.
Tpt.3
Tpt.4
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
G
C/G
G7
D/G
D7/G

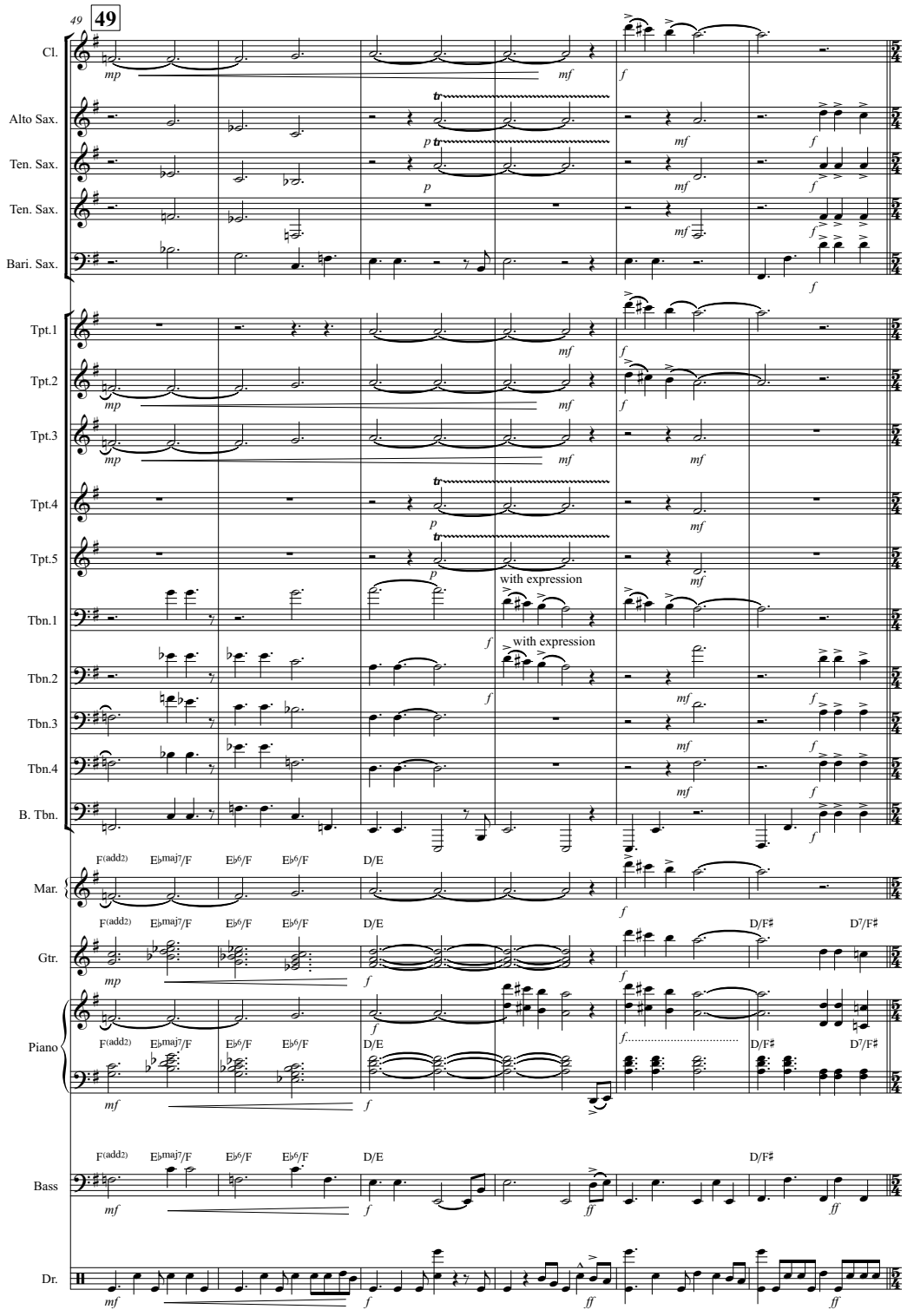

30
A2-30
Cl.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.3
Tpt.4
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
G
C/G
G7
D/G
D7/G

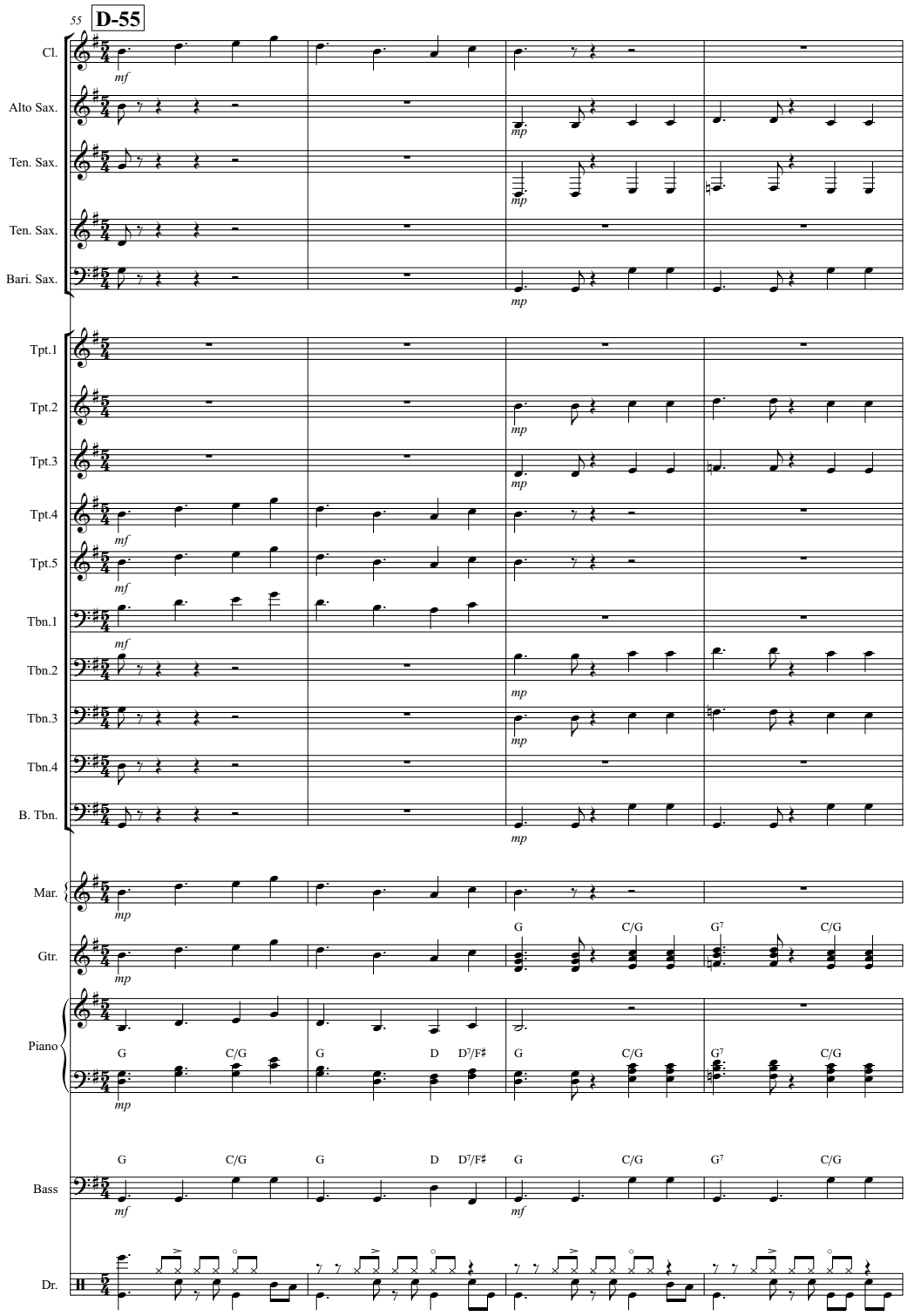

34
34
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.2
Tpt.3
Tpt.4
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
mf
G
C/G
D/G
D7/G
Am7
G(add2)/B
B7
hi hat simile...

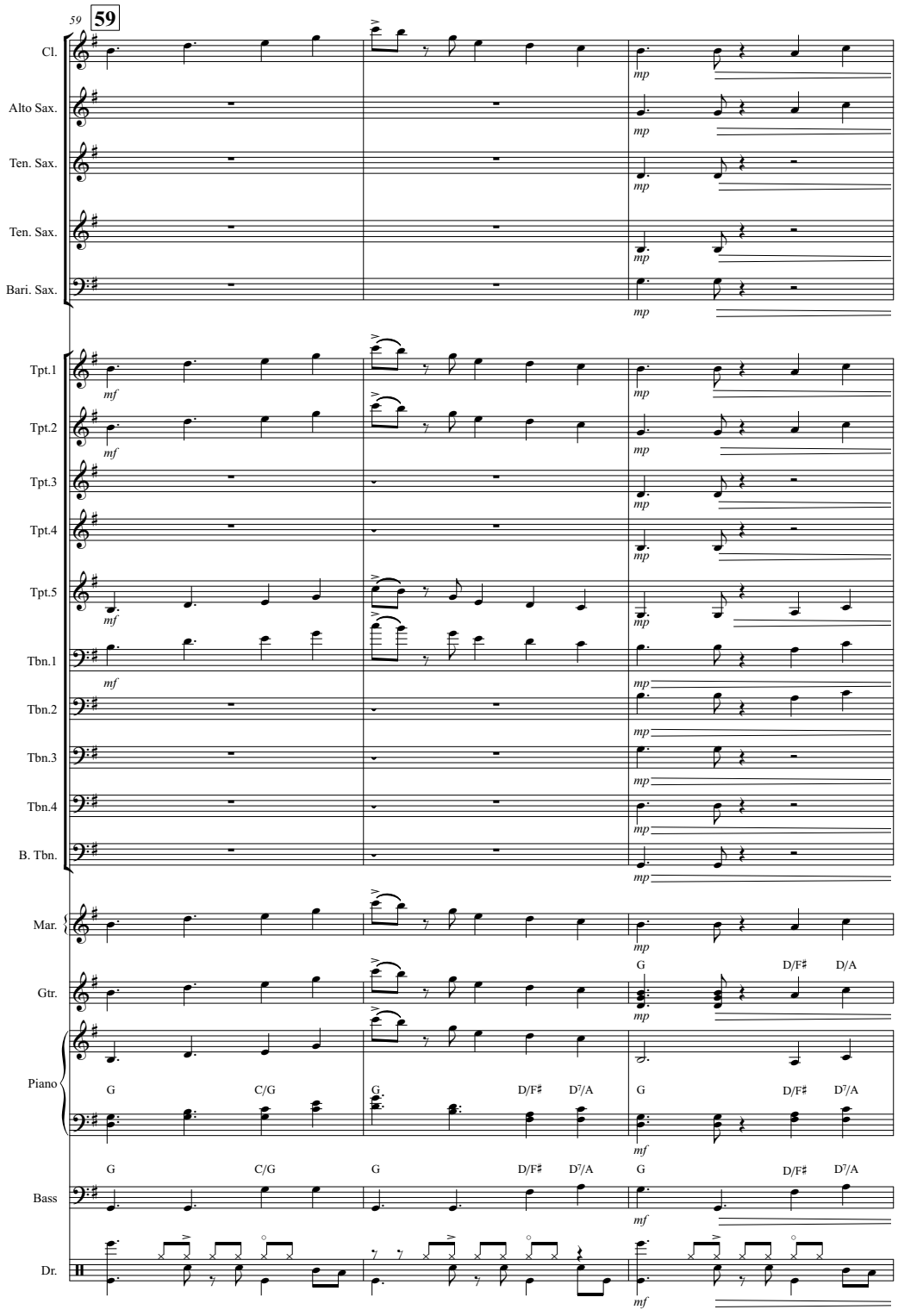

38
B-38
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mf
mp
f
C
D/E♭
Em
D/F♯
G
Am
D(SUS4)
C/D
D

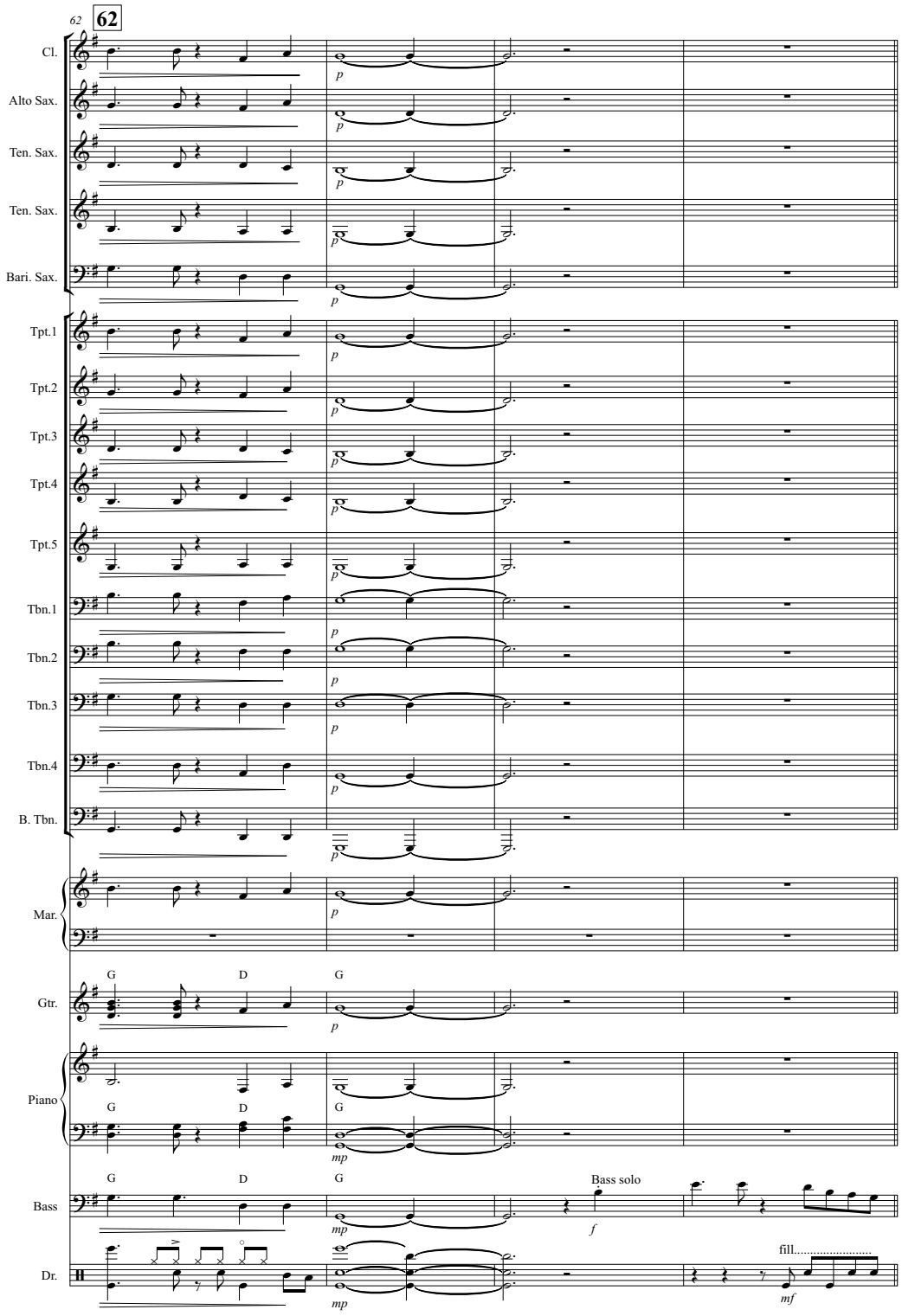

42
42
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
f
p
C
D/E♭
Em
D/F♯
G
Am7
C/E
toms

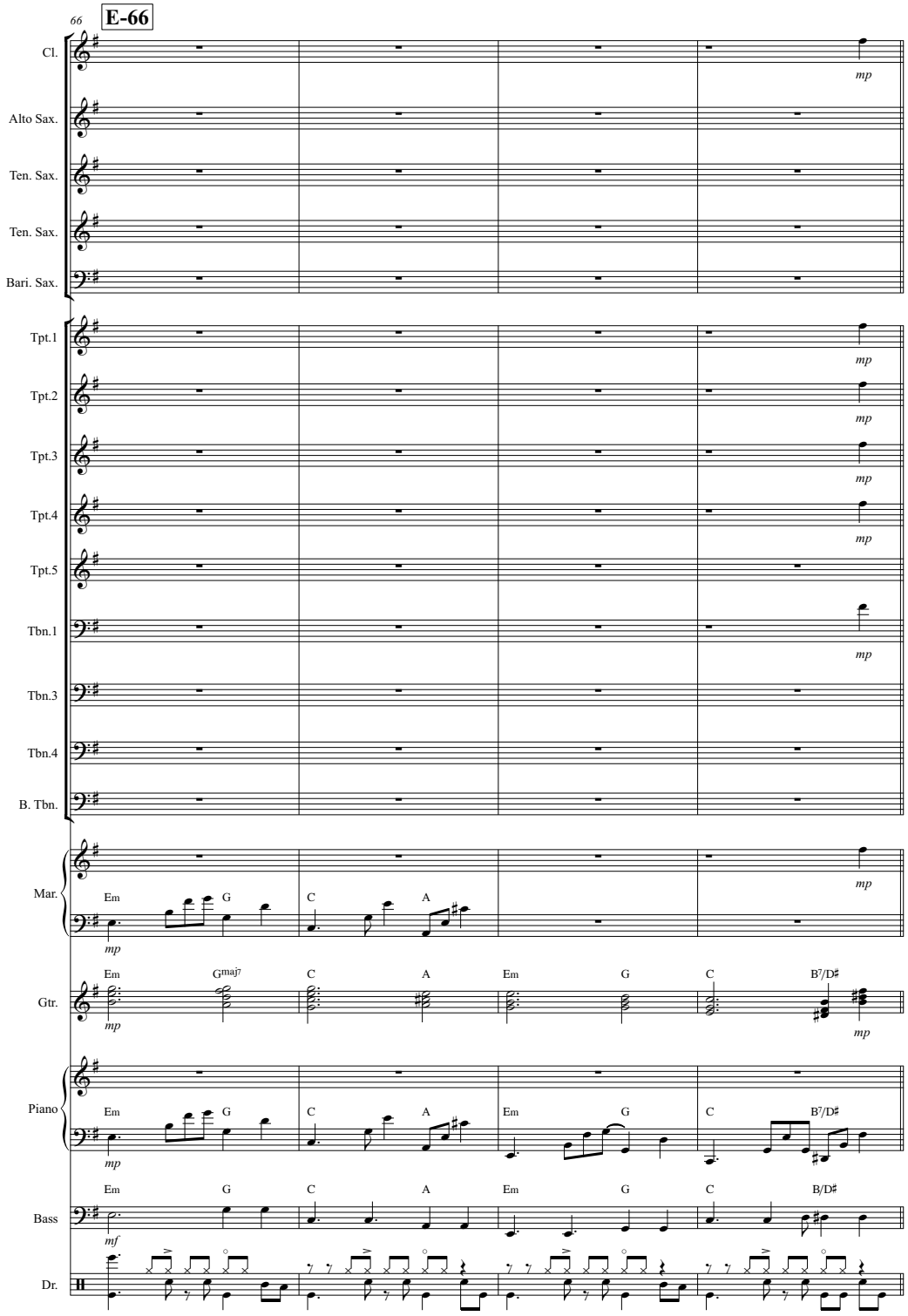

45
C-45
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
B♭maj7
B♭maj9
E♭♭6
E♭maj7
B♭/E♭
ride cymbal
ride simile....

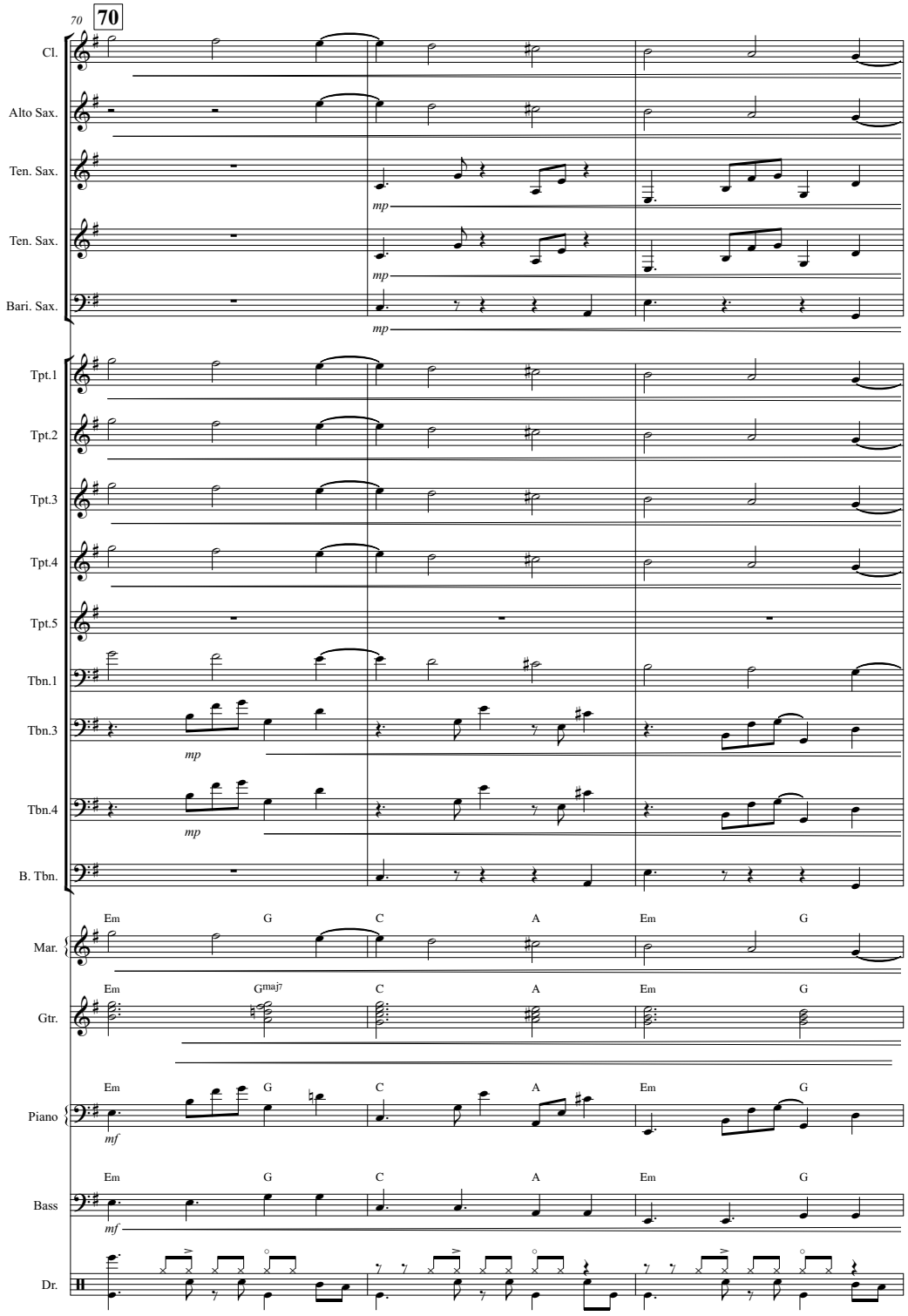

49
49
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
with expression
with expression
F(add2) E♭maj7/F E♭6/F E♭6/F D/E
Mar.
Gtr.
Piano
Bass
Dr.
D/F♯
D7/F♯

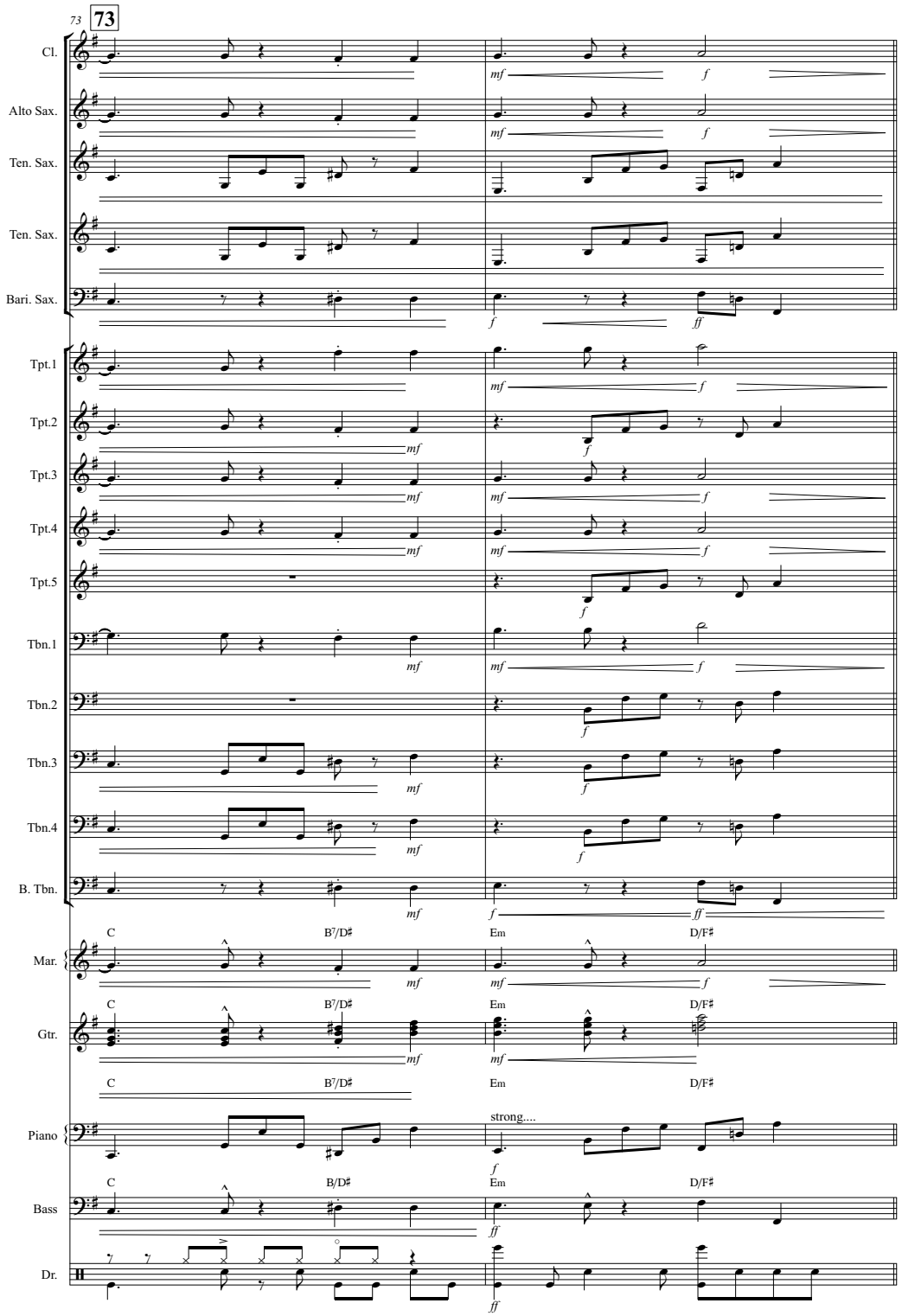

55
D-55
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mf
mp
G
C/G
G7
D
D7/F♯

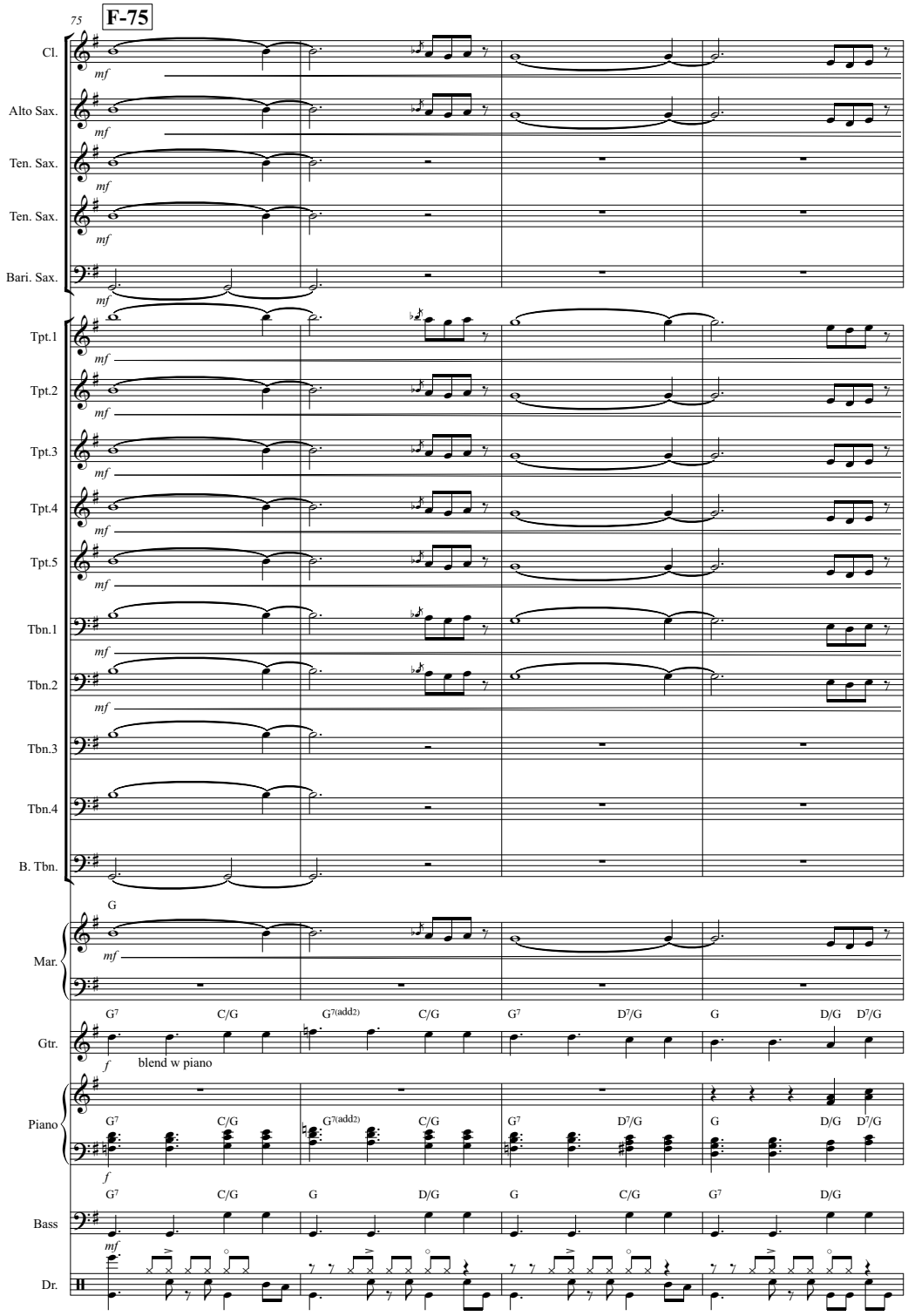

59
59
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mf
mp
G
C/G
D/F♯
D7/A
D/A

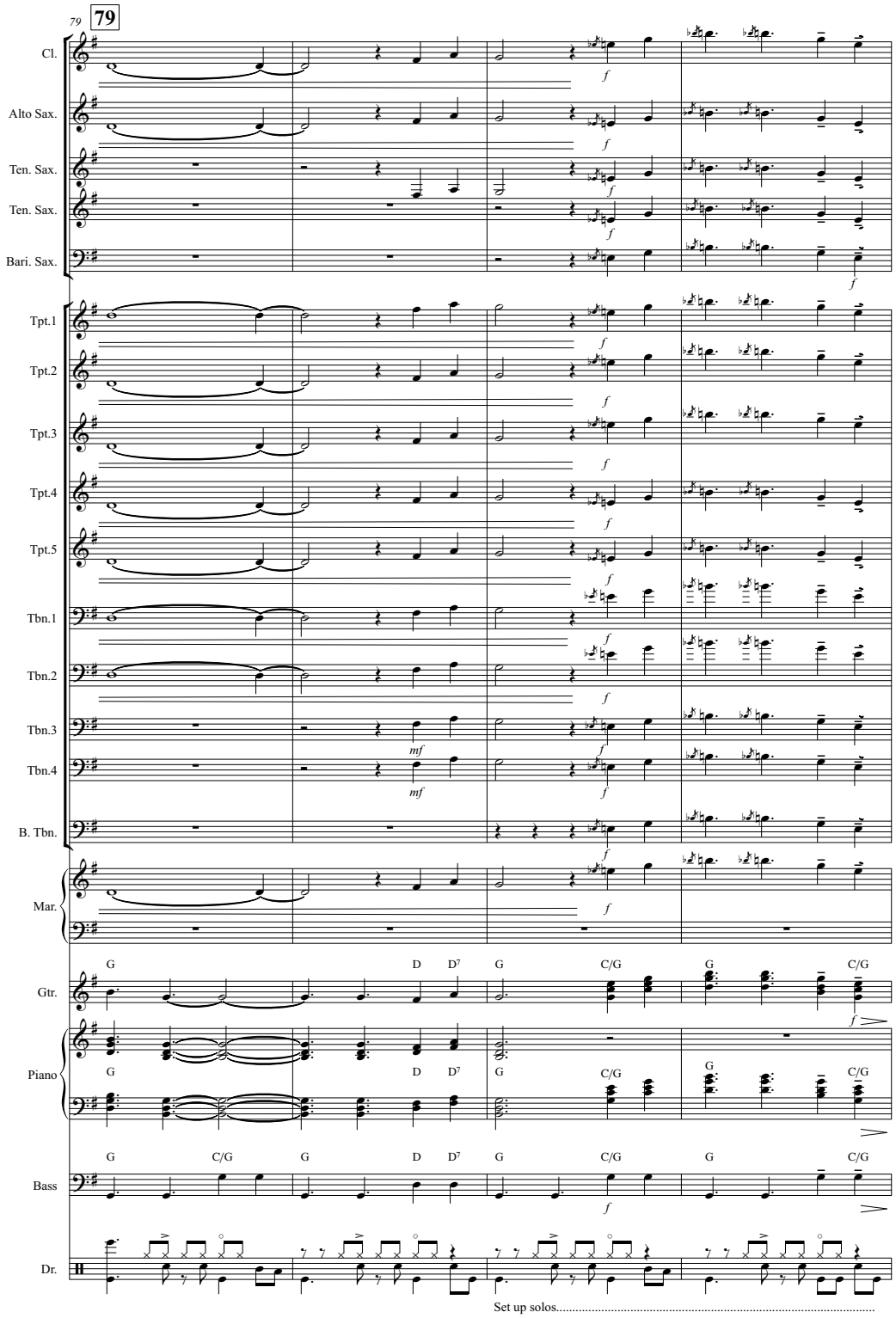

62
62
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
G
D
G
Bass solo
fill.....
p
mp
f
mf

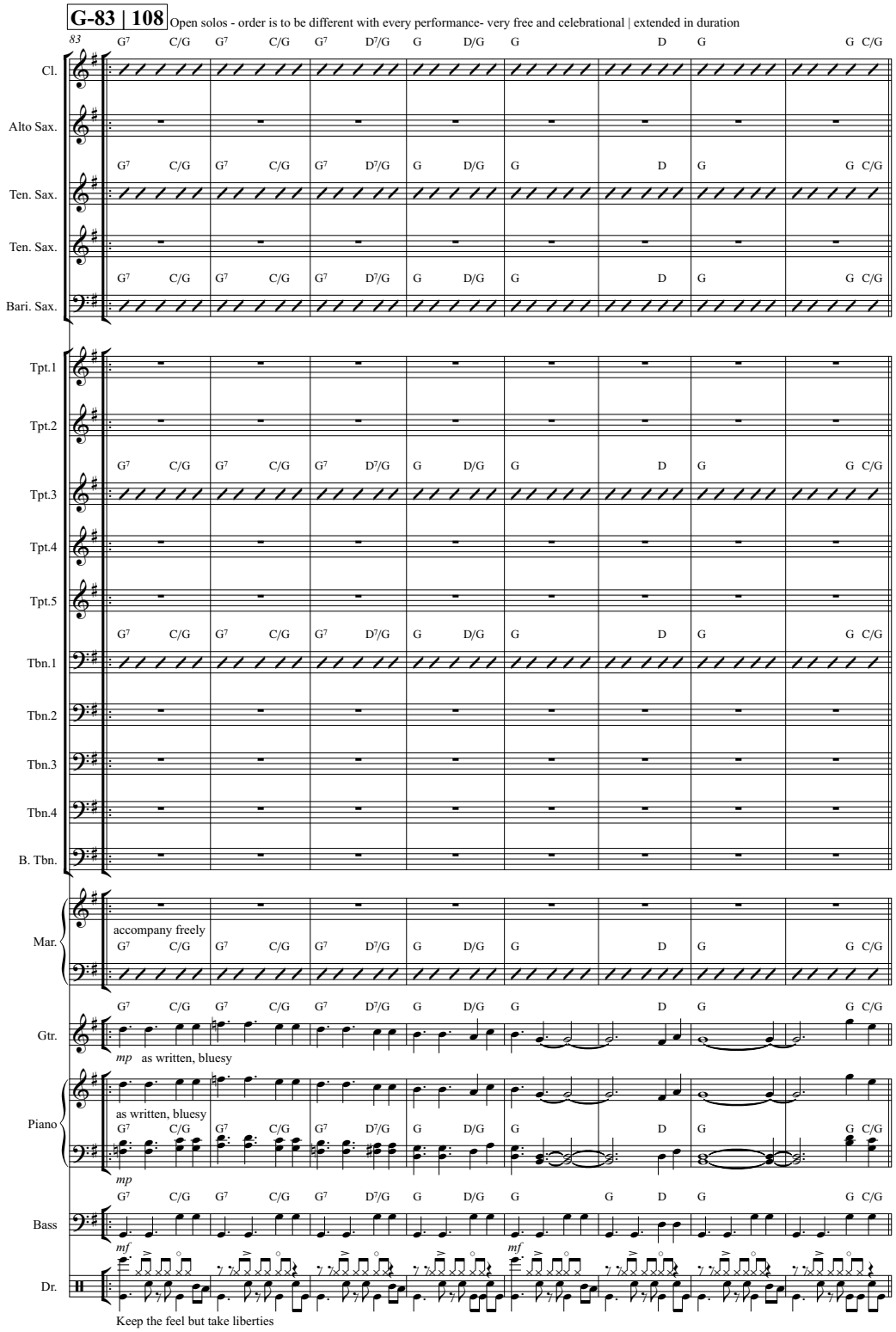

66
E-66
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
mf
Em
G
C
A
Gmaj7
B7/D♯
B/D♯

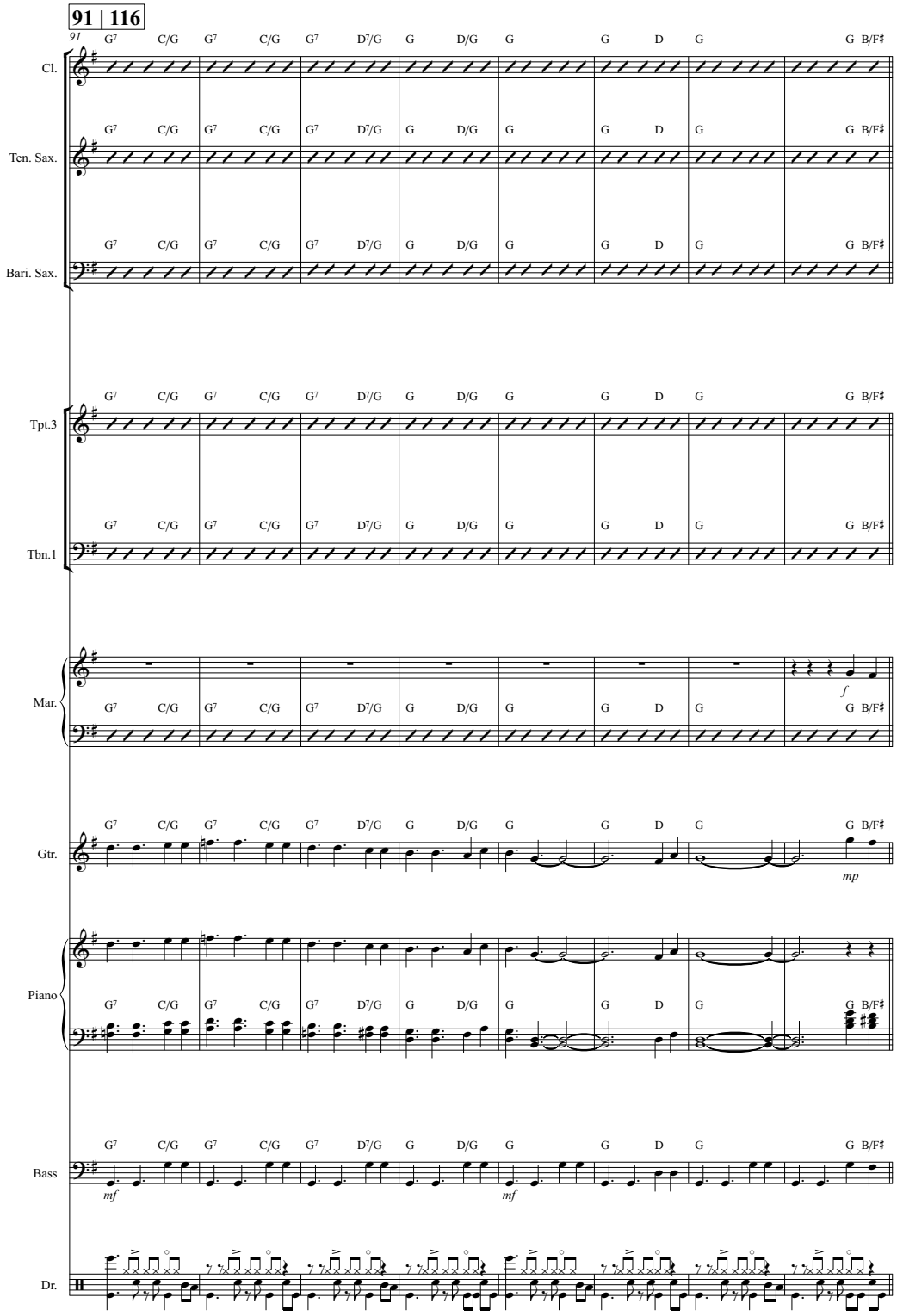

70
70
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
mp
mp
mp
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.3
Tbn.4
B. Tbn.
mp
mp
Em
G
C
A
Em
G
Mar.
Em
Gmaj7
C
A
Em
G
Gtr.
Em
G
C
A
Em
G
Piano
mf
Em
G
C
A
Em
G
Bass
mf
Dr.

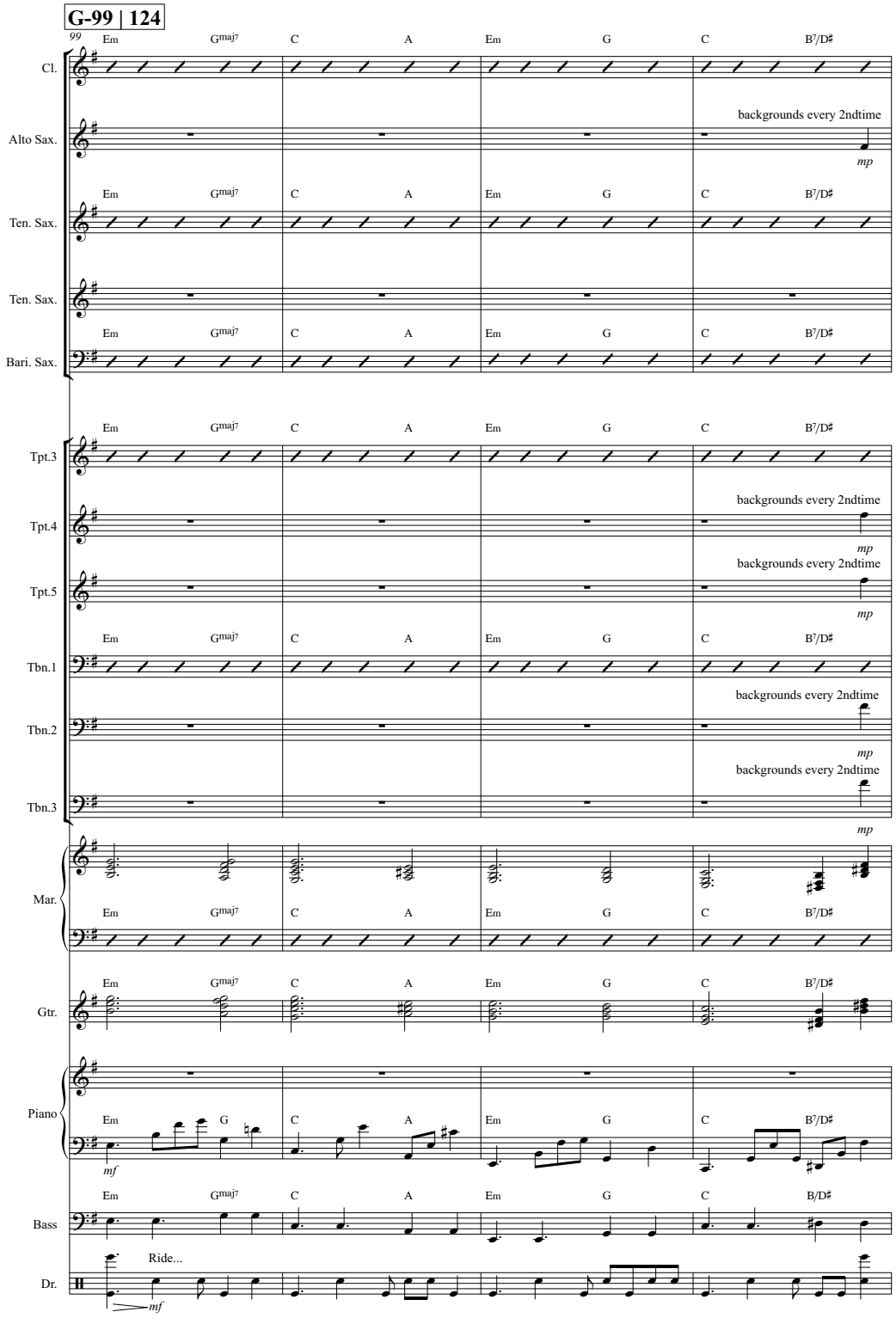

73
73
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
C
B7/D♯
Em
D/F♯
B/D♯
strong....
mf
f
ff

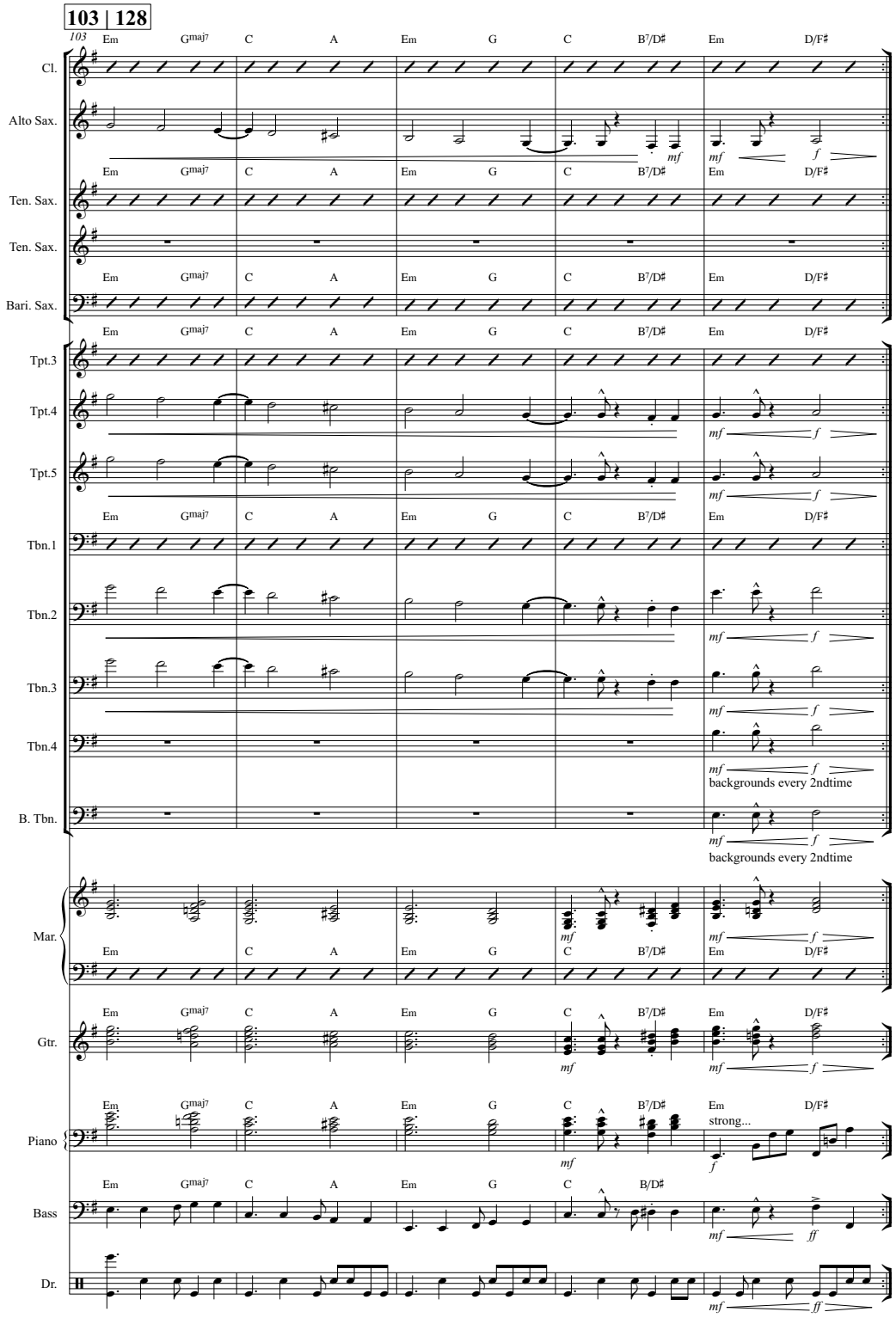

75
F-75
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mf
f
G
G7 C/G G7(add2) C/G G7 D7/G G D/G D7/G
blend w piano
G7 C/G G7(add2) C/G G7 D7/G G D/G D7/G
G7 C/G G D/G G C/G G7 D/G

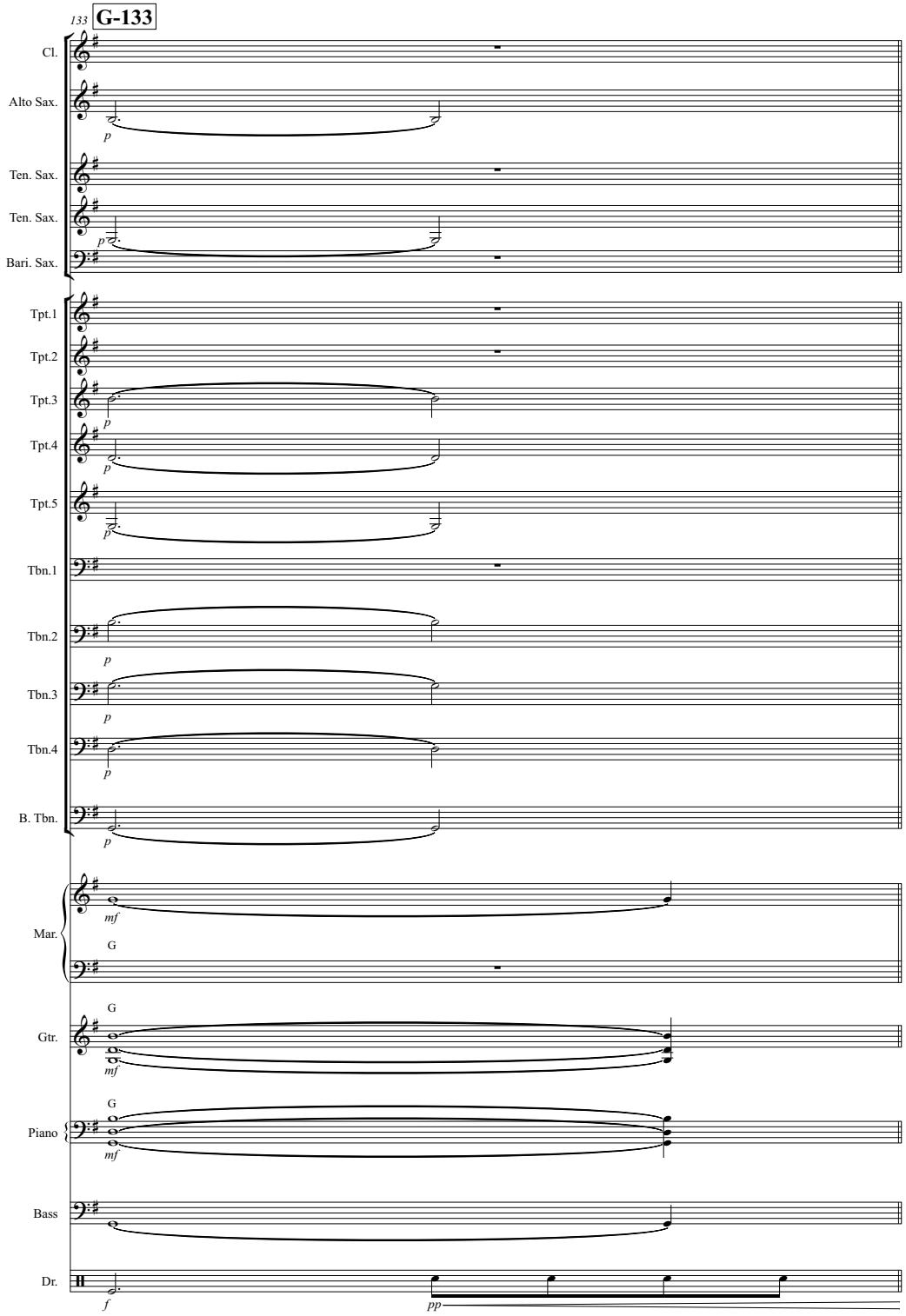

79
79
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
f
mf
G
C/G
D
D7
Set up solos.....

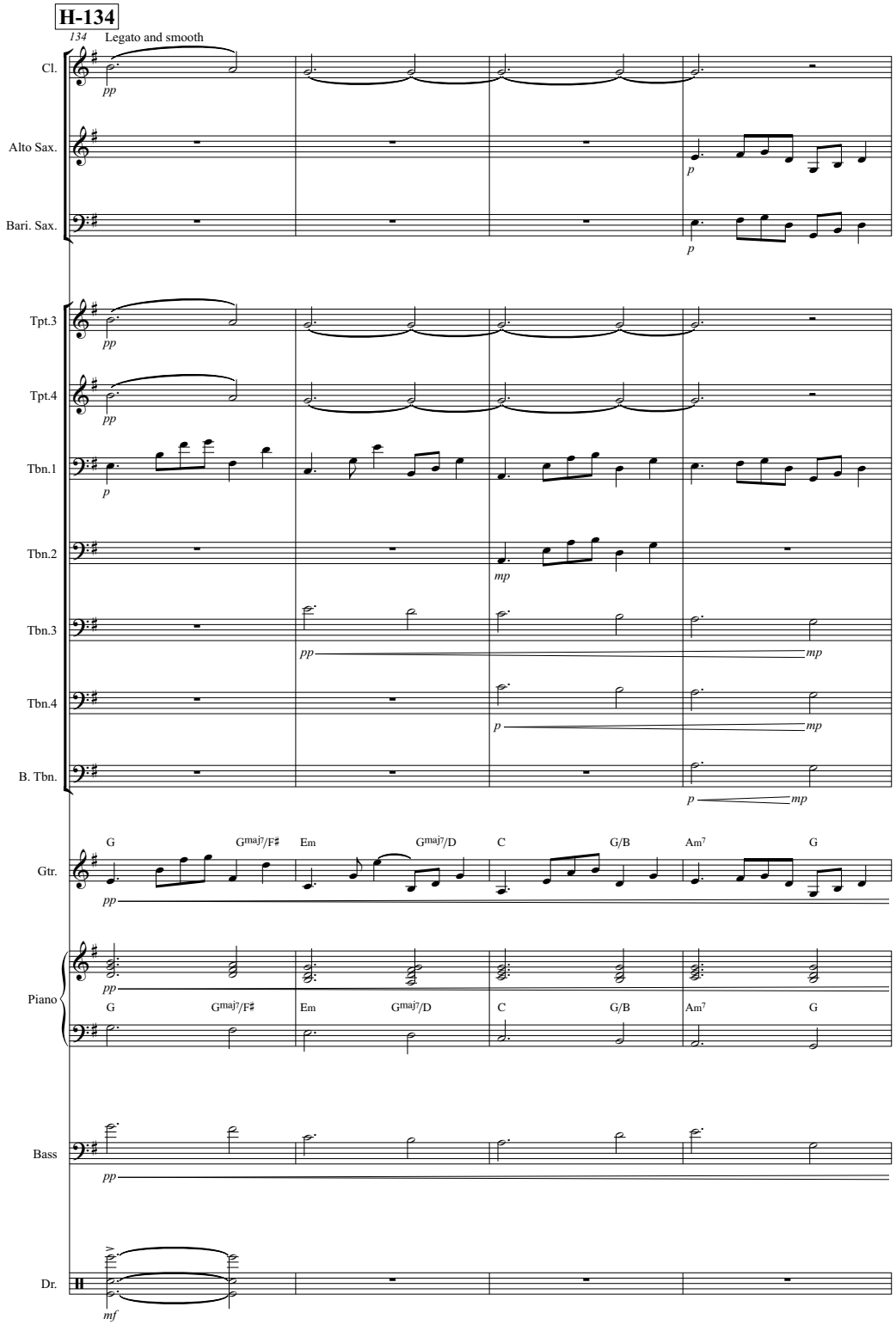

G-83 | 108
Open solos - order is to be different with every performance- very free and celebrational | extended in duration
83
G7 C/G G7 C/G G7 D7/G G D/G G D G G C/G
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
accompany freely
Gtr.
mp as written, bluesy
Piano
as written, bluesy
mp
Bass
mf
Dr.
Keep the feel but take liberties

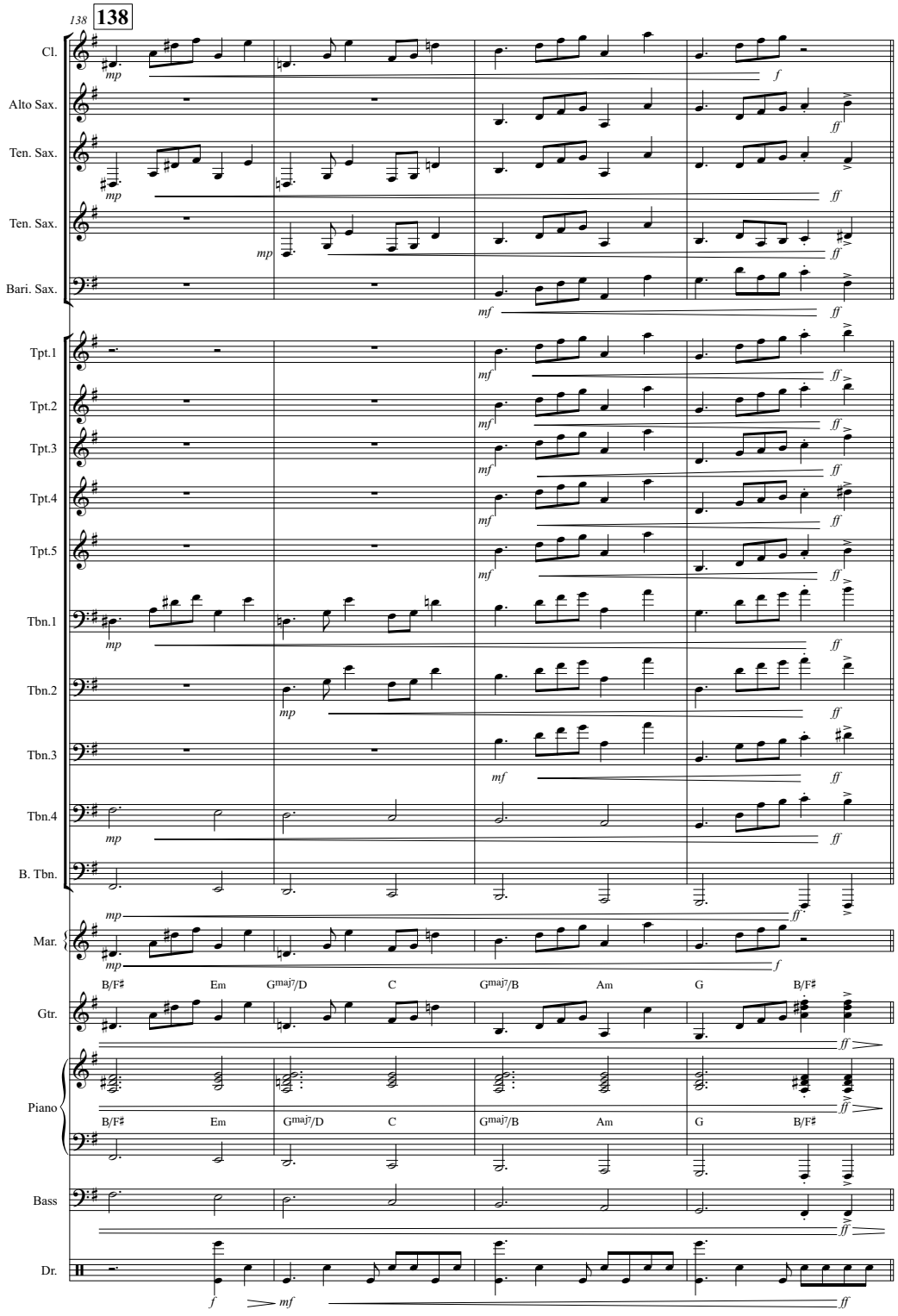

91 | 116
91
Cl.
Ten. Sax.
Bari. Sax.
Tpt.3
Tbn.1
Mar.
Gtr.
Piano
Bass
Dr.
G7 C/G G7 C/G G7 D7/G G D/G G G D G G B/F♯
f
mp
mf
mf

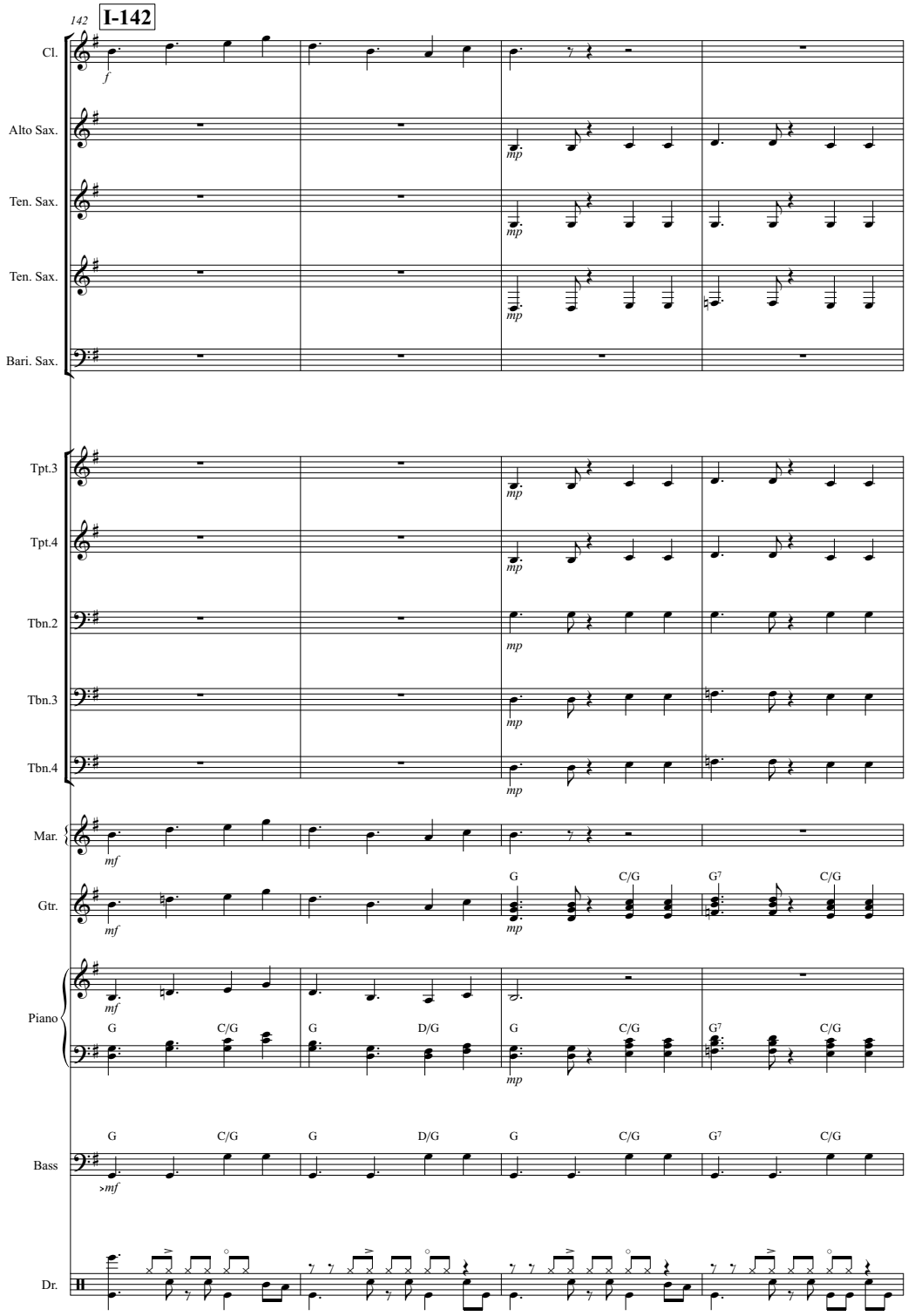

G-99 | 124
99
Em
Gmaj7
C
A
Em
G
C
B7/D♯
Cl.
Alto Sax.
backgrounds every 2ndtime
mp
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Mar.
Gtr.
Piano
mf
Bass
B/D♯
Ride...
Dr.
mf

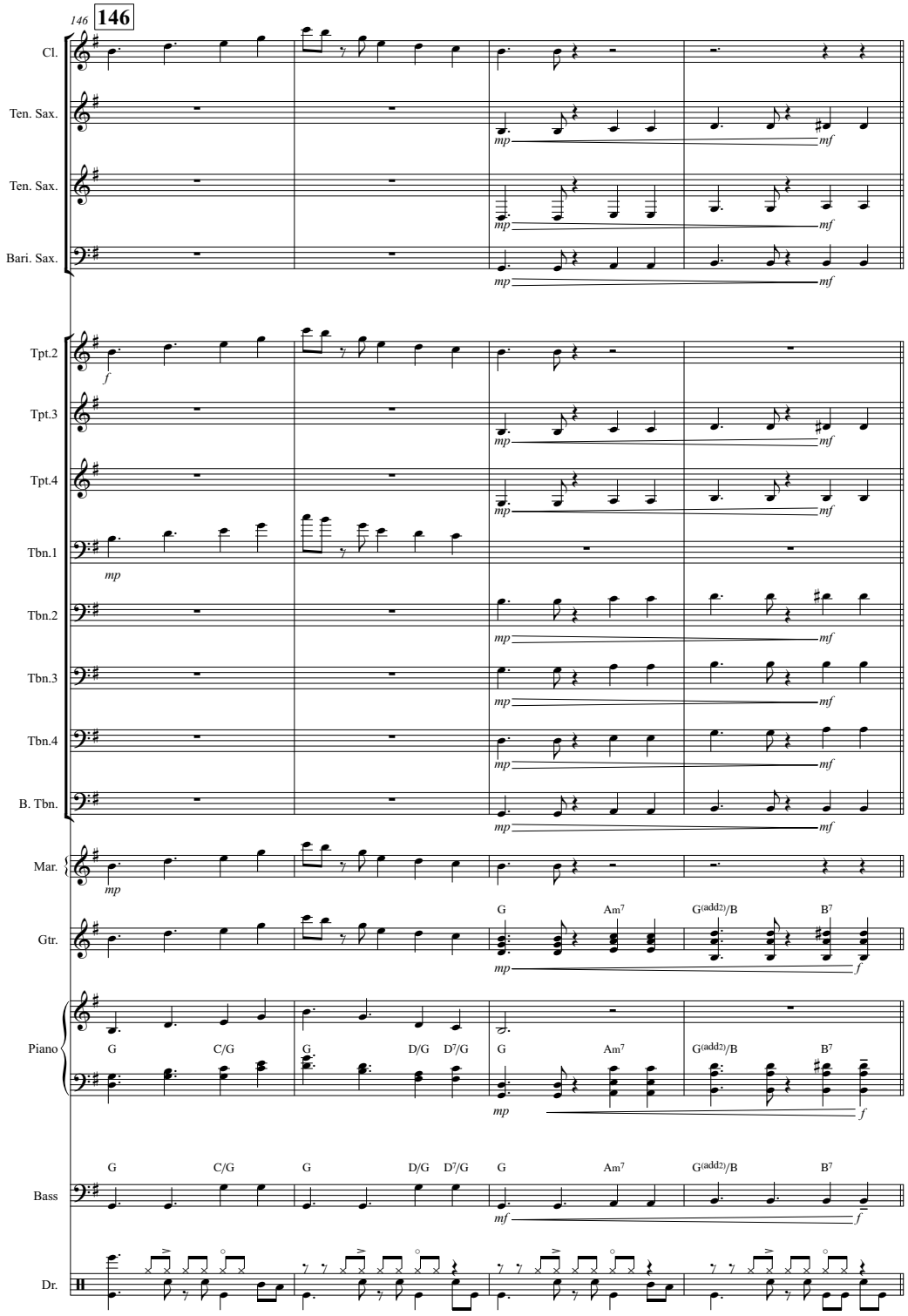

103 | 128
103
Em Gmaj7 C A Em G C B7/D♯ Em D/F♯
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
backgrounds every 2ndtime
backgrounds every 2ndtime
Mar.
Gtr.
Piano
strong...
Bass
Dr.
mf
f
ff

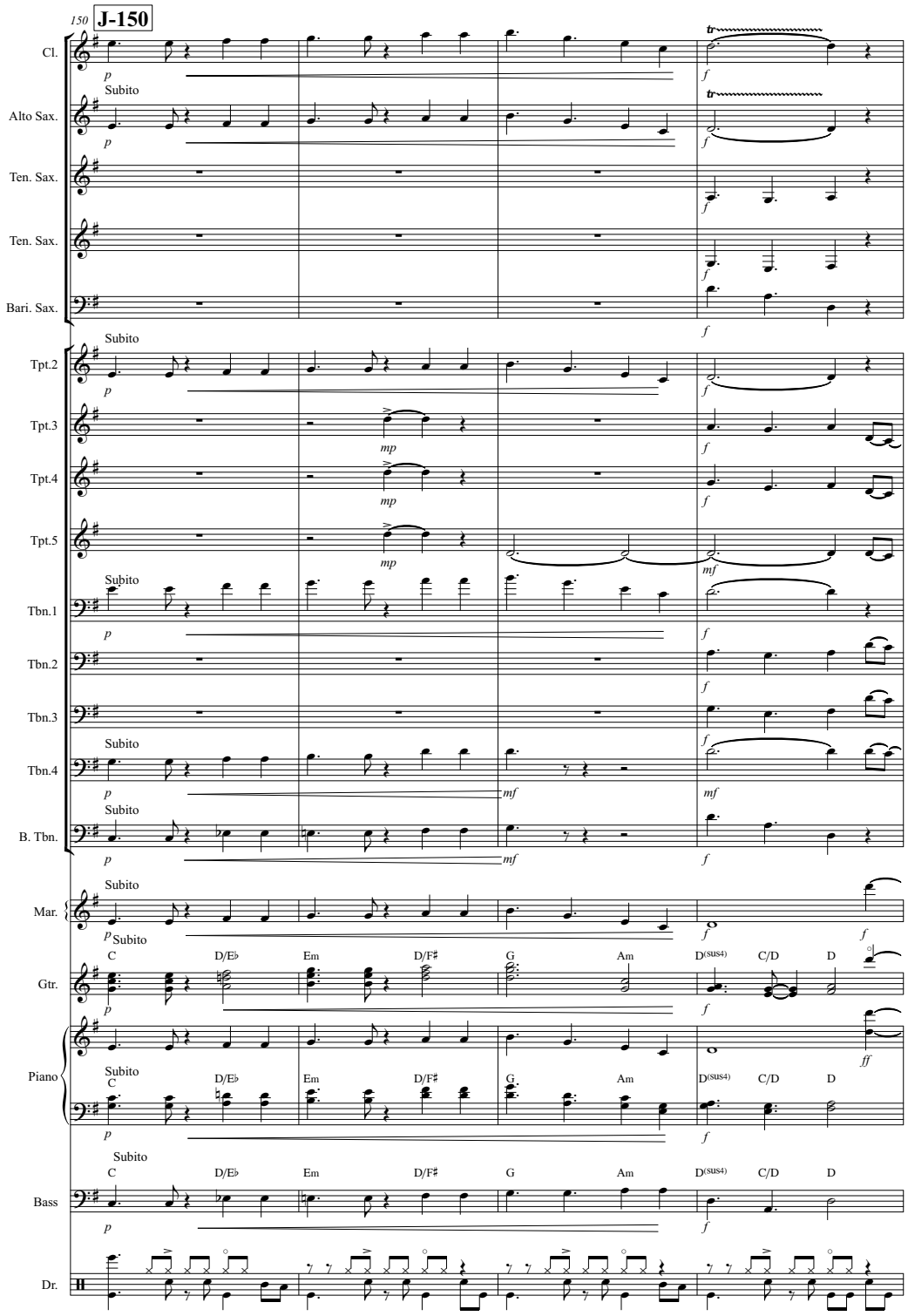

133
G-133
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
p
mf
f
pp
G

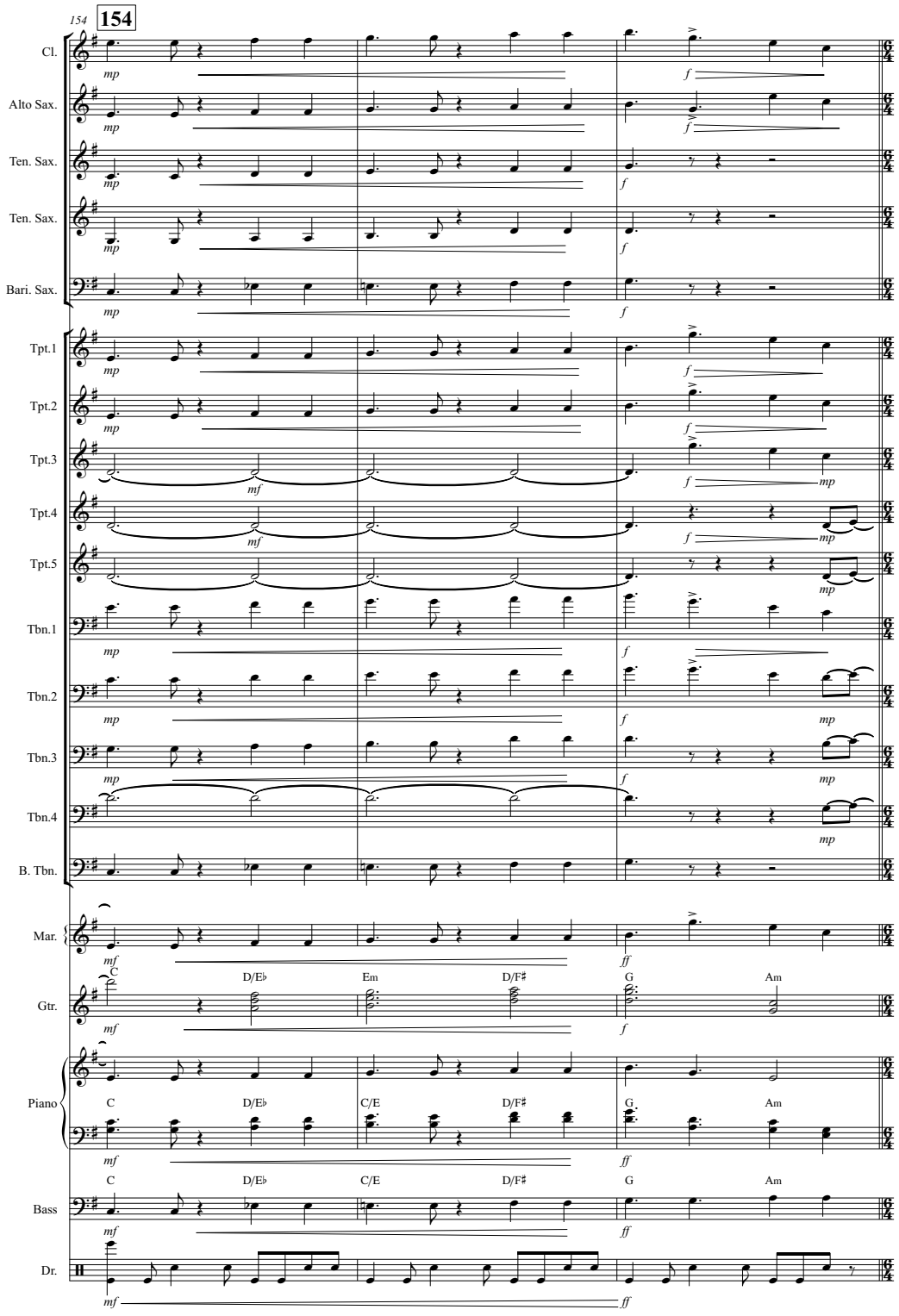

H-134
134
Legato and smooth
Cl.
Alto Sax.
Bari. Sax.
Tpt.3
Tpt.4
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Gtr.
Piano
Bass
Dr.
pp
p
mp
mf
G
Gmaj7/F♯
Em
Gmaj7/D
C
G/B
Am7
G

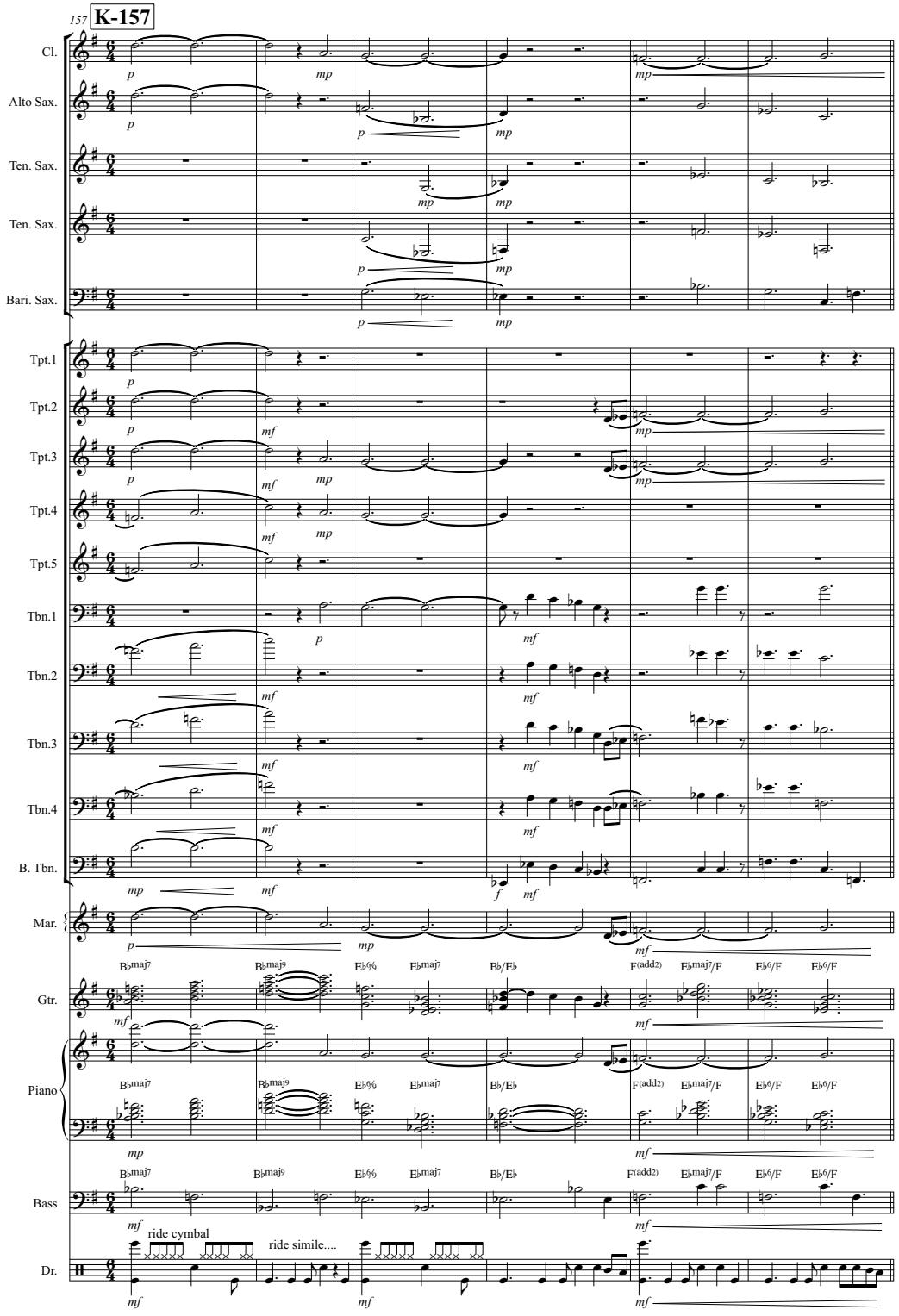

138
138
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
B/F♯ Em G^maj7/D C G^maj7/B Am G B/F♯
mp
mf
f
ff

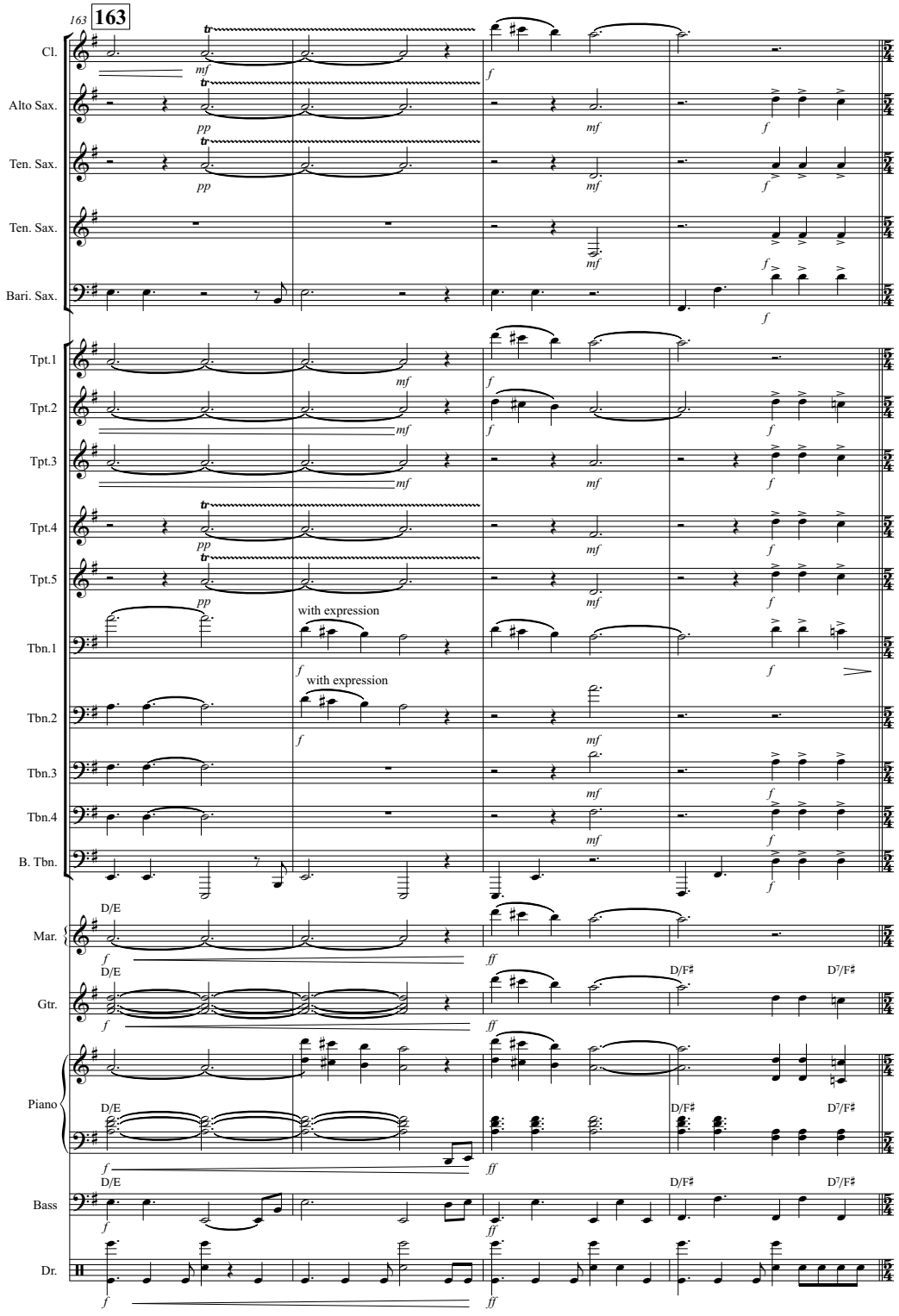

142
I-142
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.3
Tpt.4
Tbn.2
Tbn.3
Tbn.4
Mar.
Gtr.
Piano
Bass
Dr.
f
mp
mf
>mf
G
C/G
D/G
G7

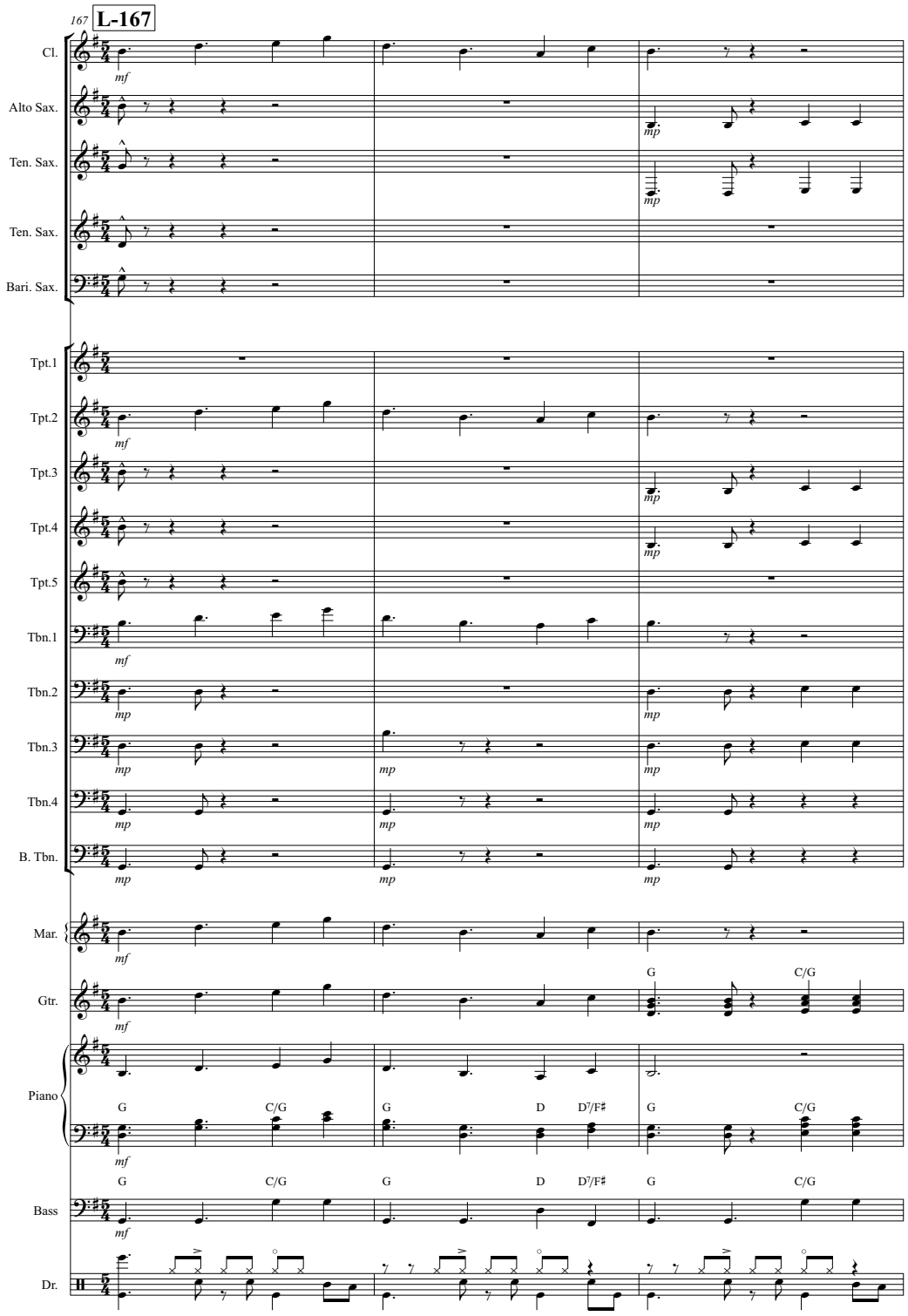

146
146
Cl.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.2
Tpt.3
Tpt.4
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
mf
f
G
Am7
G(add2)/B
B7
C/G
D/G
D7/G

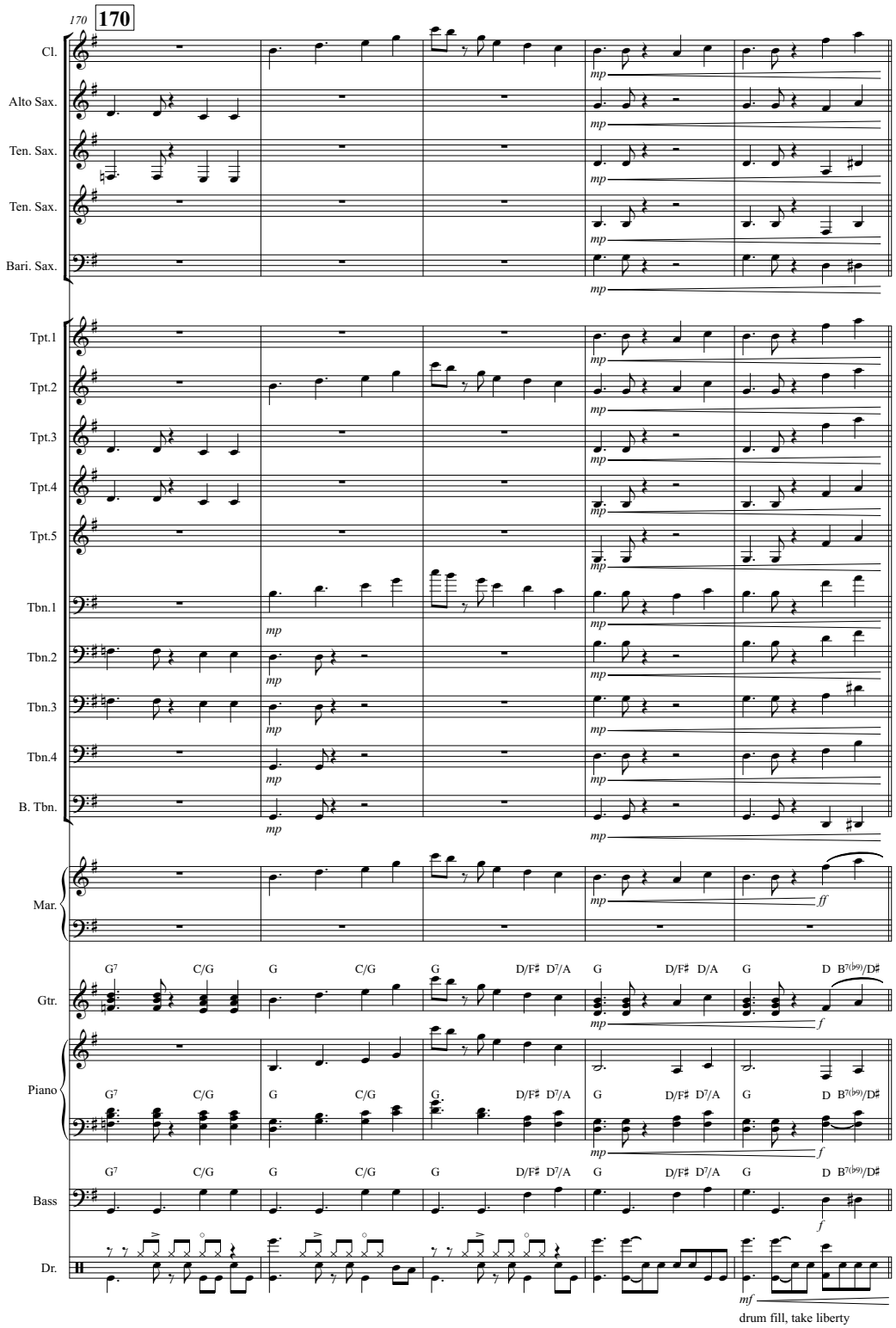

150
J-150
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
Subito
C
D/E♭
Em
D/F♯
G
Am
D(SUS4)
C/D
D

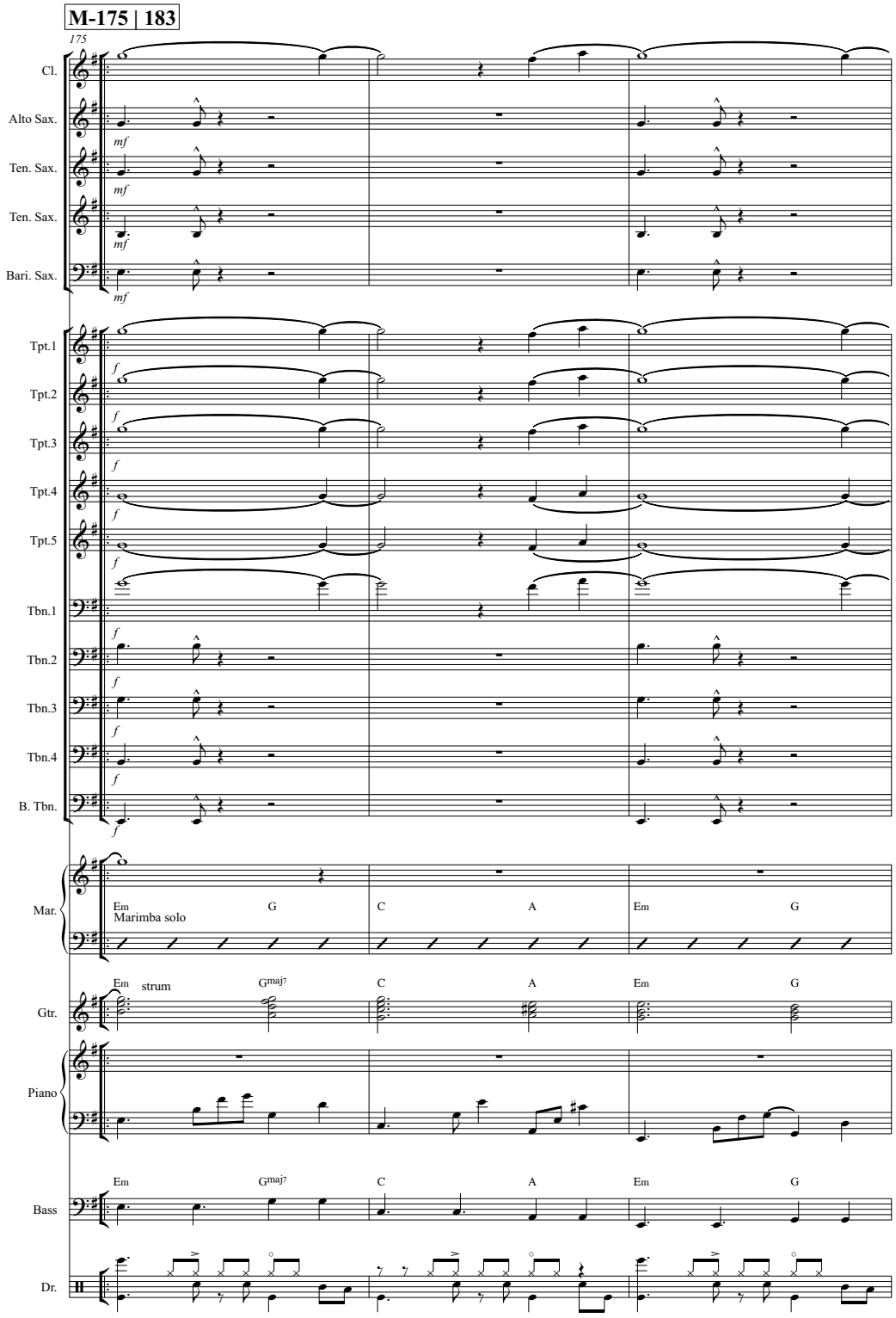

154
154
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
C
D/E♭
Em
D/F♯
G
Am
C/E

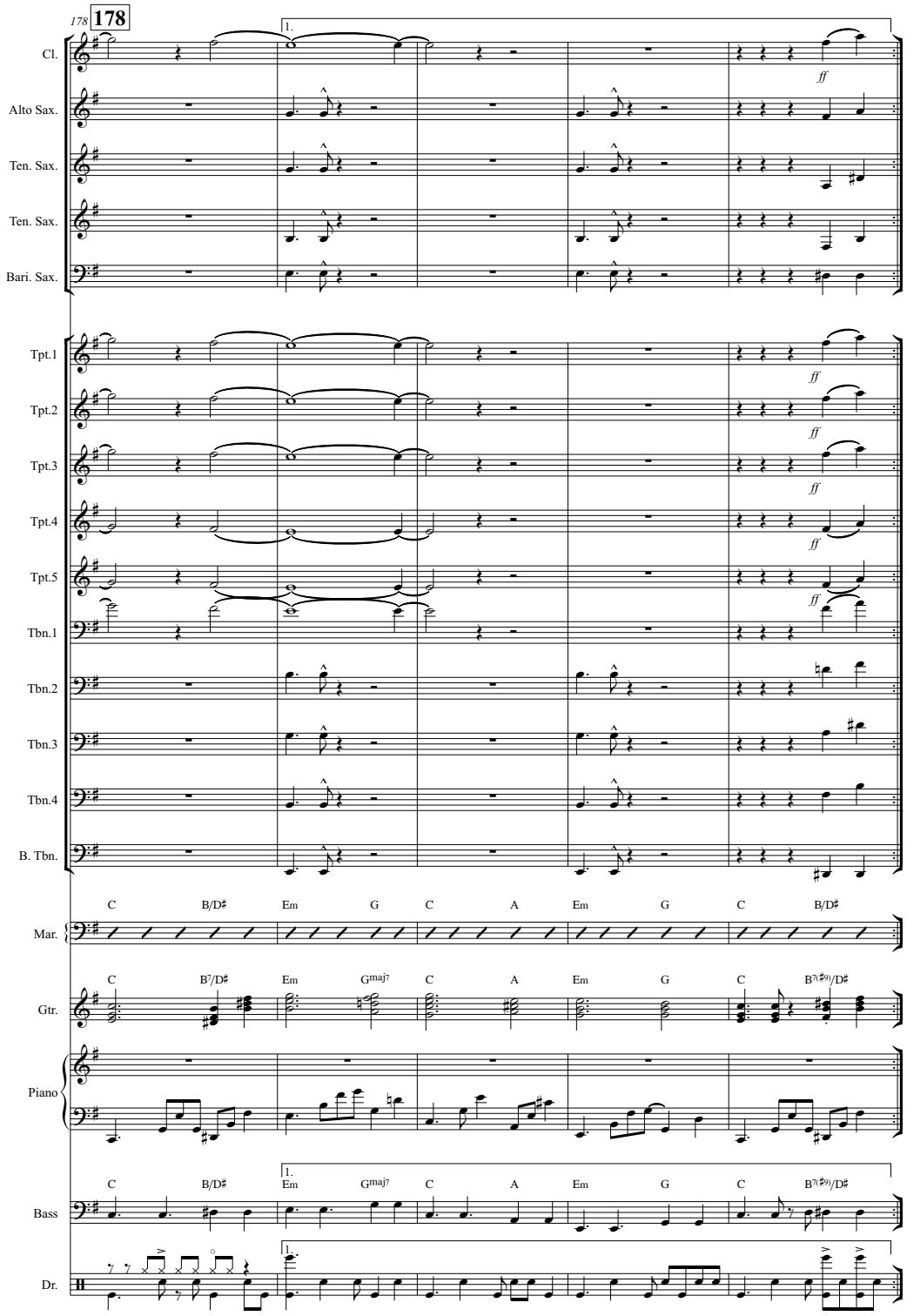

157
K-157
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
B♭maj7
B♭maj9
E♭6/9
E♭maj7
B♭/E♭
F(add2)
E♭maj7/F
E♭6/F
ride cymbal
ride simile....

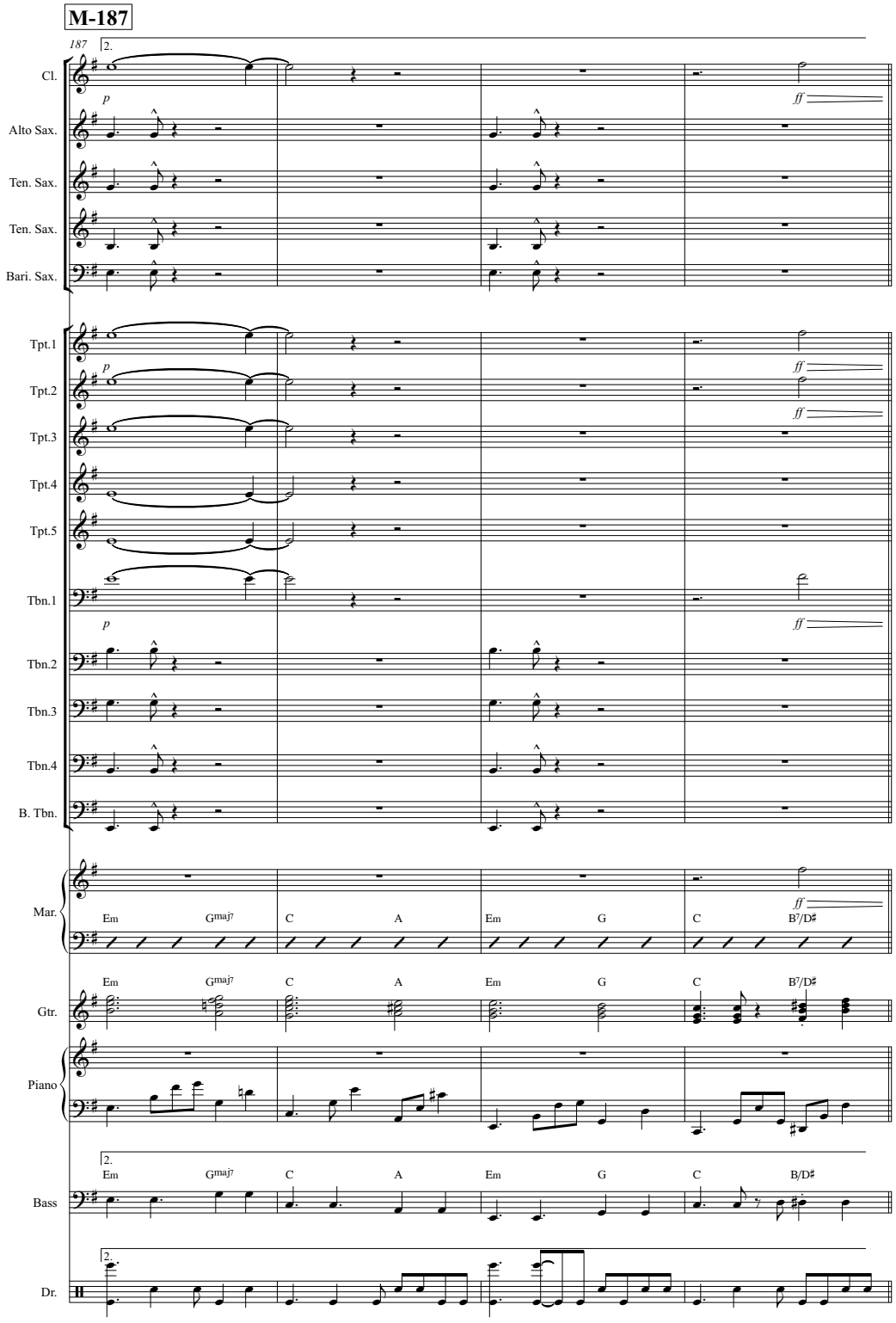

163
163
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
with expression
with expression
D/E
D/F♯
D7/F♯

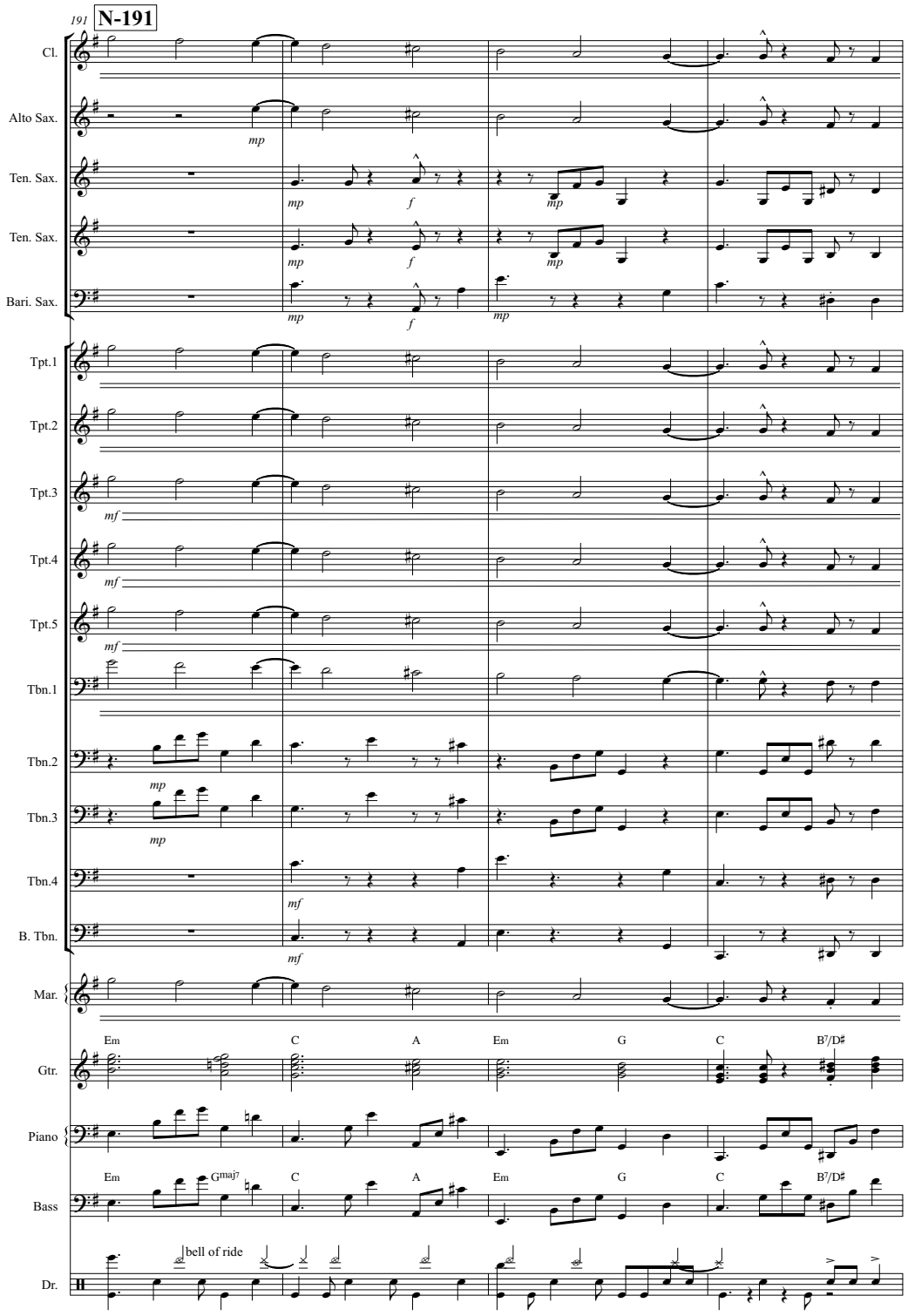

167
L-167
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mf
mp
G
C/G
D
D7/F♯

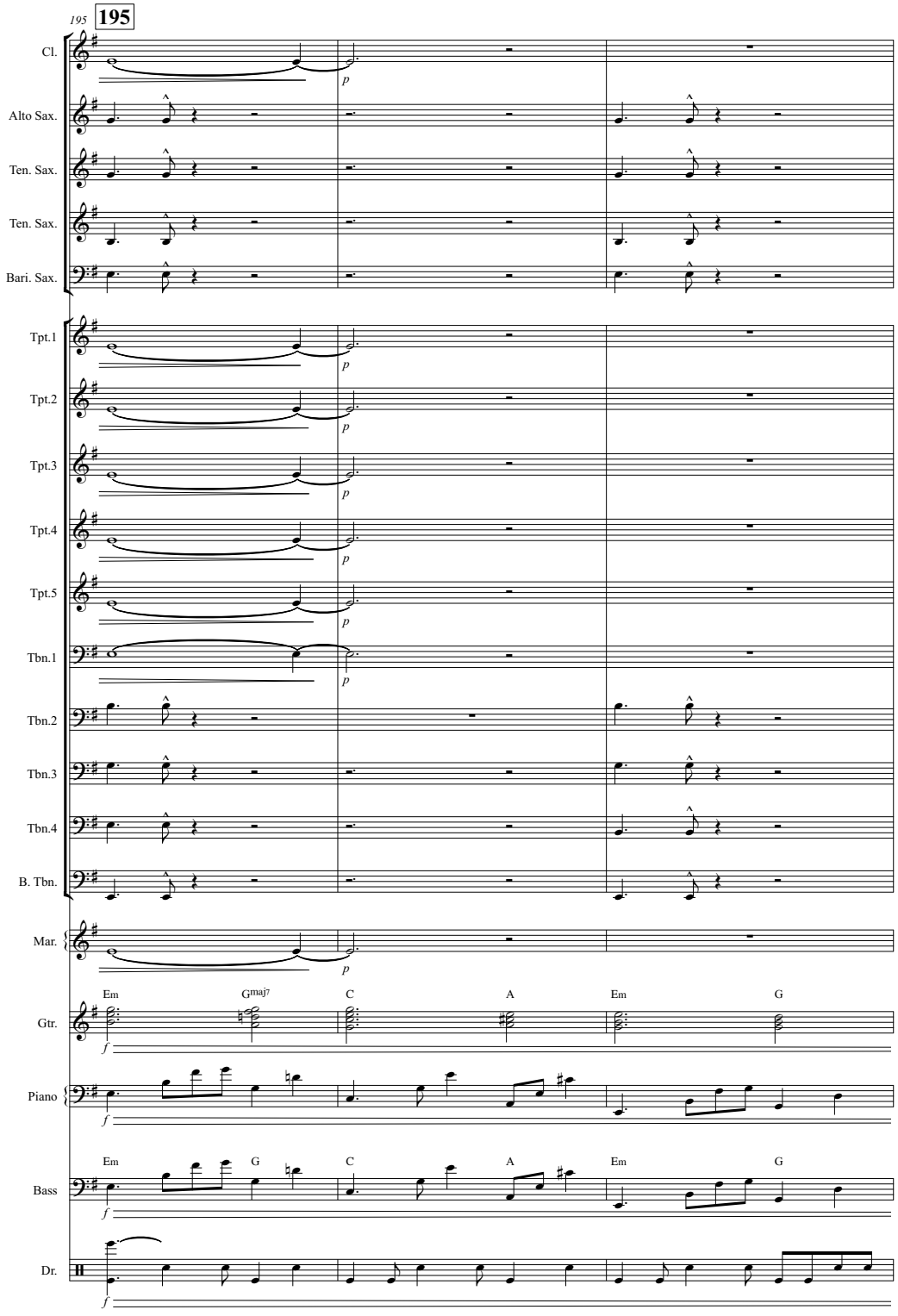

170
170
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
ff
f
mf
G7 C/G G C/G G D/F♯ D7/A G D/F♯ D/A G D B7(♭9)/D♯
drum fill, take liberty

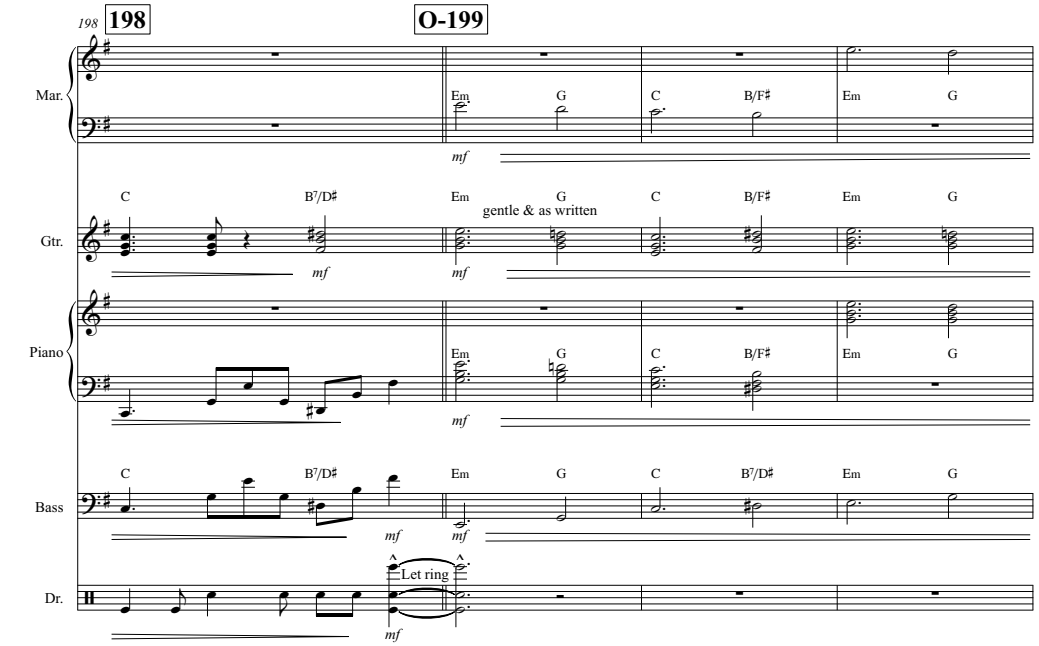

M-175 | 183
175
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
mf
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
f
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Em
Marimba solo
G
C
A
Em
G
Gtr.
strum
Gmaj7
Piano
Bass
Dr.

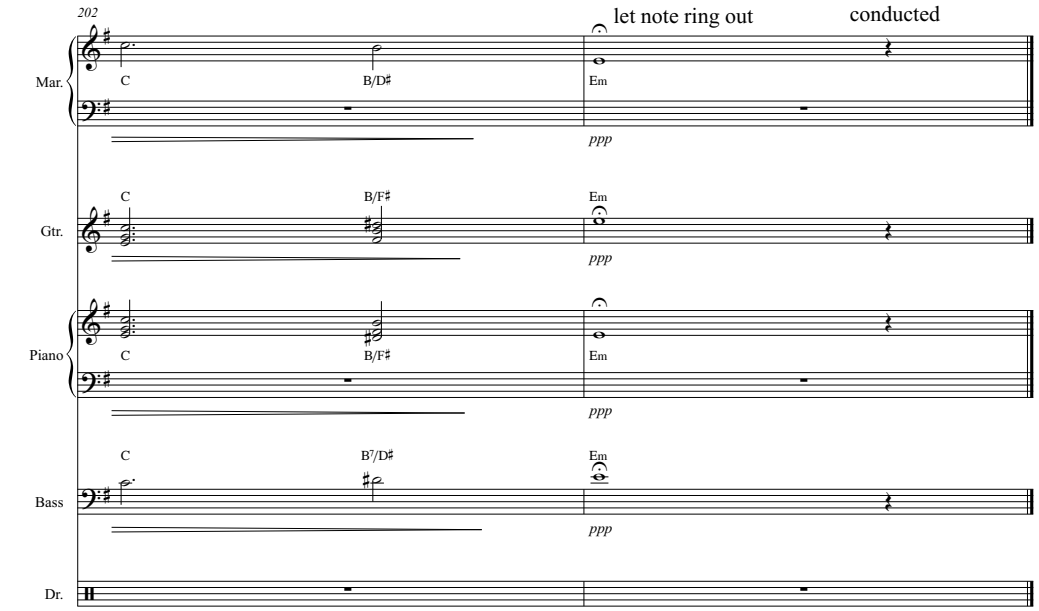

178
178
1.
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
ff
C B/D♯ Em G C A Em G C B/D♯
Mar.
C B7/D♯ Em Gmaj7 C A Em G C B7(♯9)/D♯
Gtr.
Piano
C B/D♯ Em Gmaj7 C A Em G C B7(♯9)/D♯
Bass
Dr.


M-187
187
2.
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
p
ff
Em
Gmaj7
C
A
G
B7/D♯
B/D♯


191
N-191
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
mp
f
mf
Em
C
A
Em
G
C
B7/D♯
Gmaj7
bell of ride


195
195
Cl.
Alto Sax.
Ten. Sax.
Ten. Sax.
Bari. Sax.
Tpt.1
Tpt.2
Tpt.3
Tpt.4
Tpt.5
Tbn.1
Tbn.2
Tbn.3
Tbn.4
B. Tbn.
Mar.
Gtr.
Piano
Bass
Dr.
p
f
Em
Gmaj7
C
A
Em
G


198
198
O-199
Mar.
Gtr.
Piano
Bass
Dr.
C
B7/D♯
Em
G
C
B/F♯
Em
G
gentle & as written
Let ring
mf


202
Mar.
Gtr.
Piano
Bass
Dr.
C
B/D♯
Em
let note ring out
conducted
C
B/F♯
Em
C
B/F♯
Em
C
B7/D♯
Em
ppp

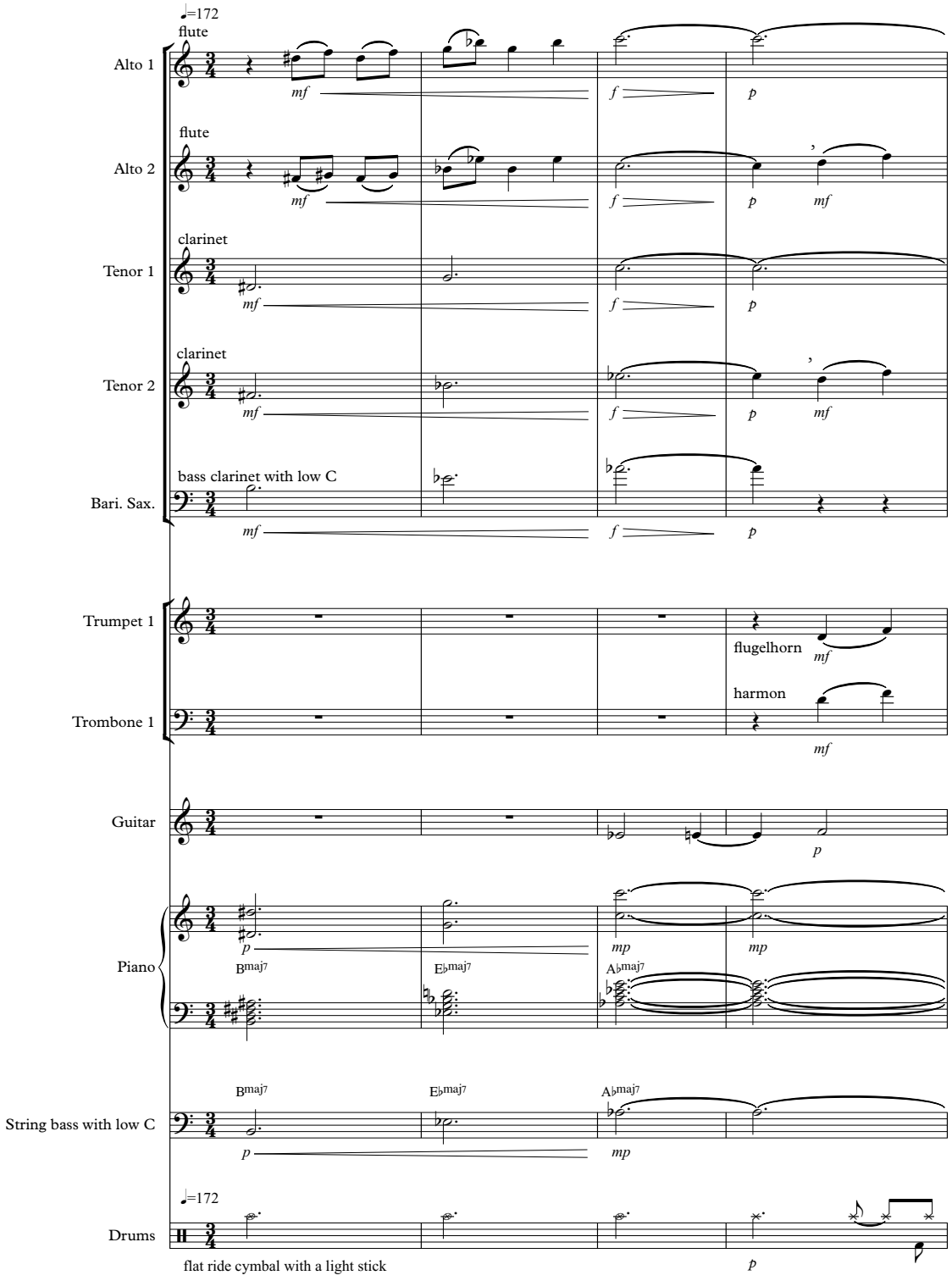
HUMANASONICS

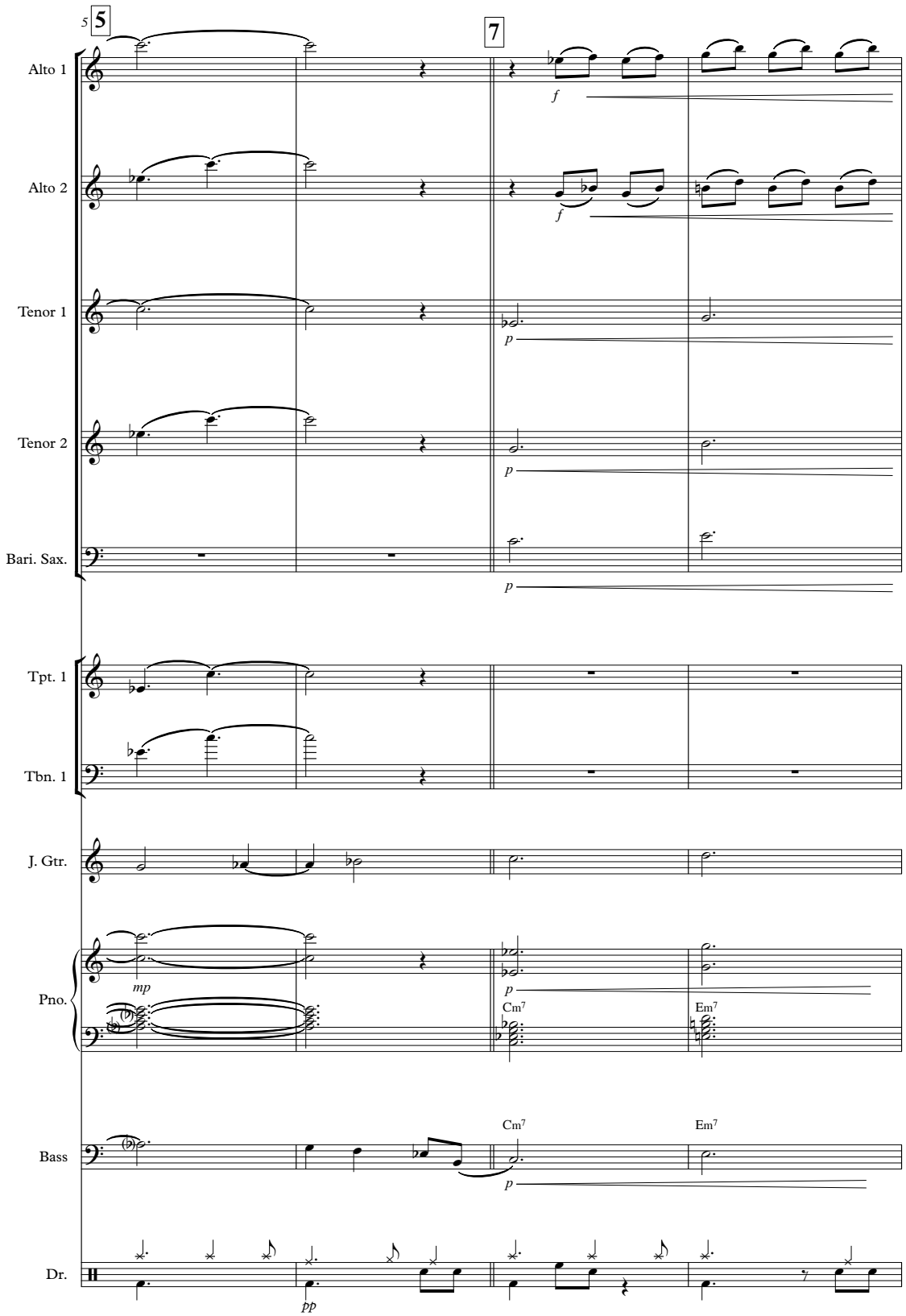
Movement IV

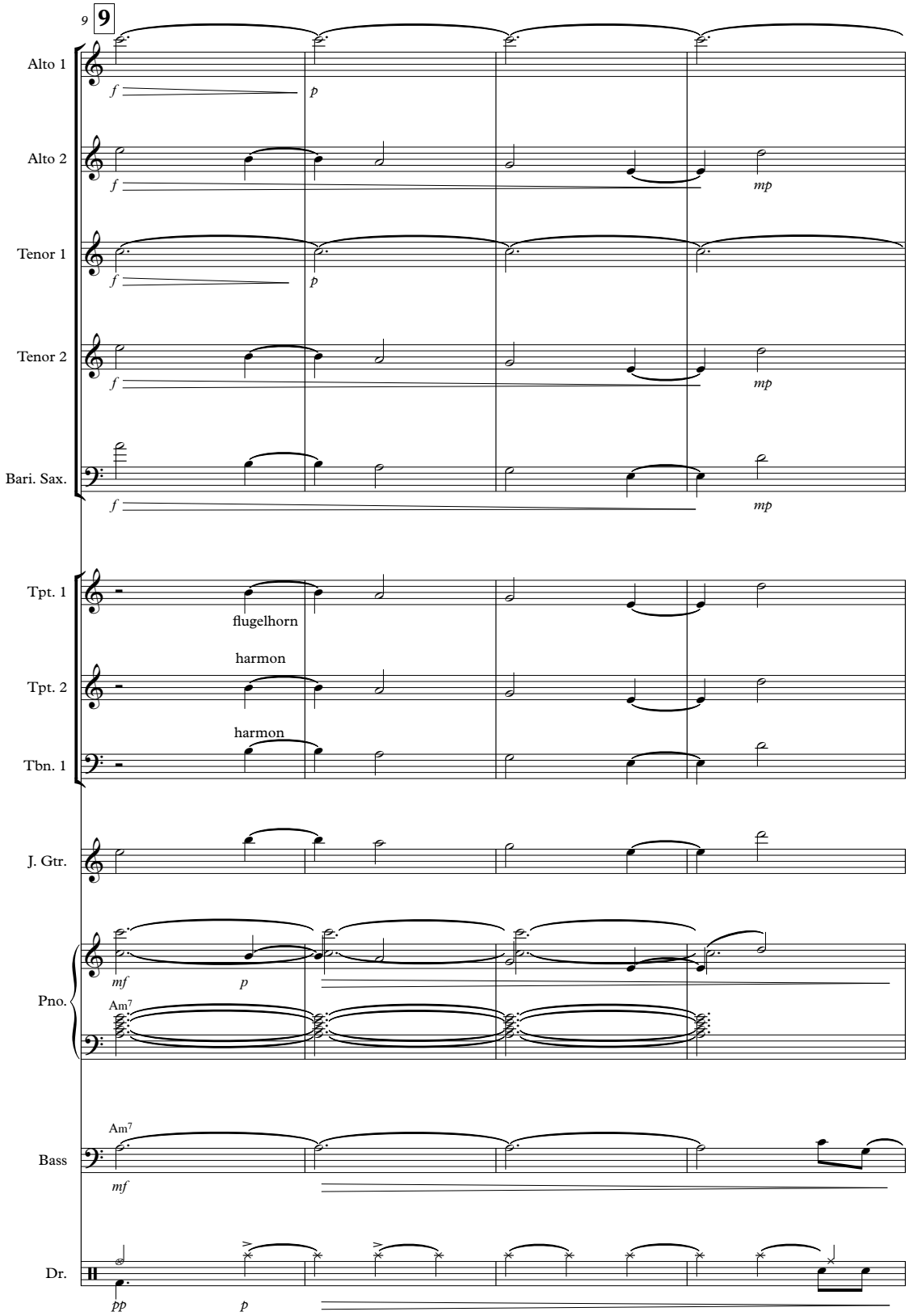
Kinship

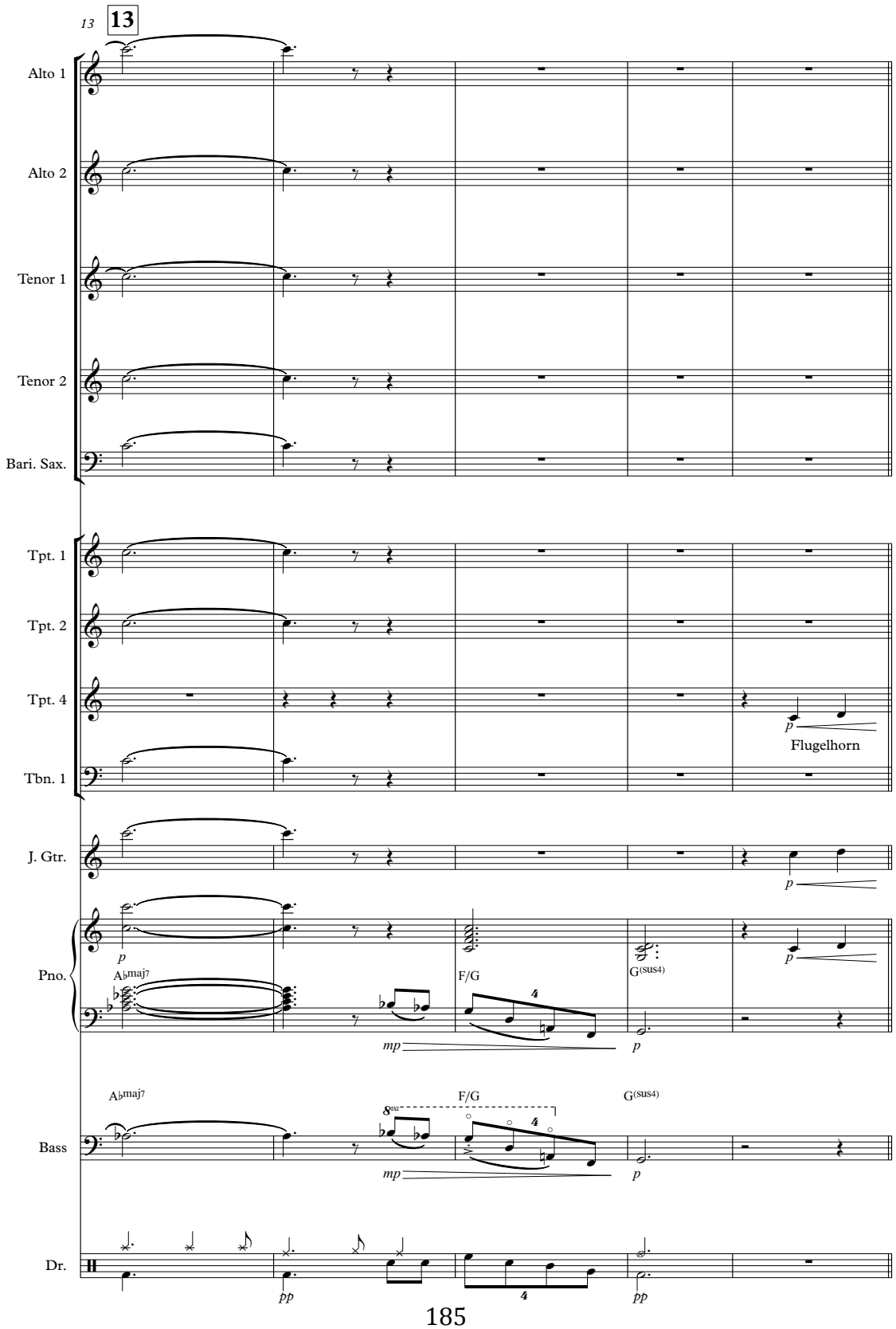
Composer | Paul Novotny

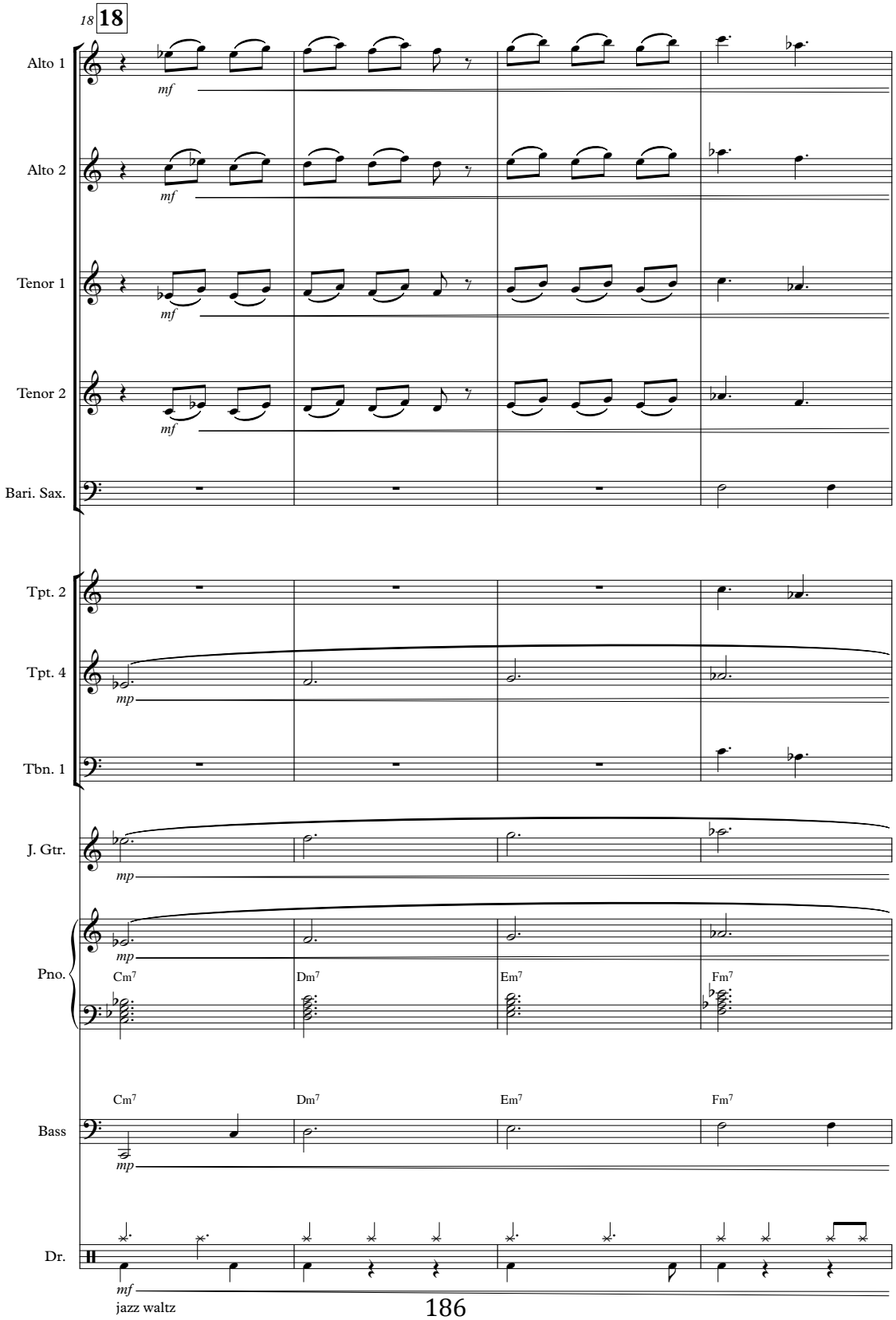
Flugelhorn feature
Jazz Waltz

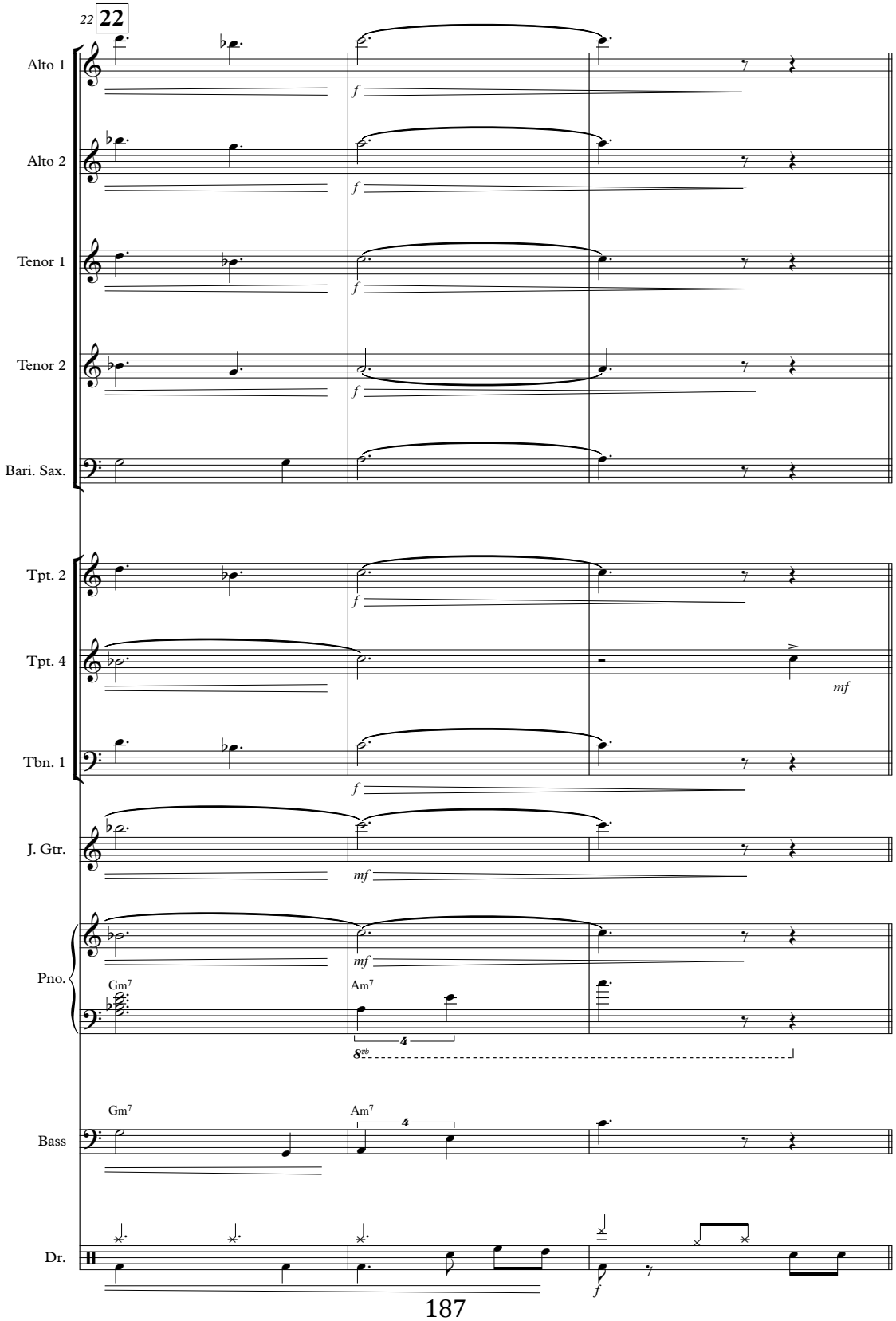


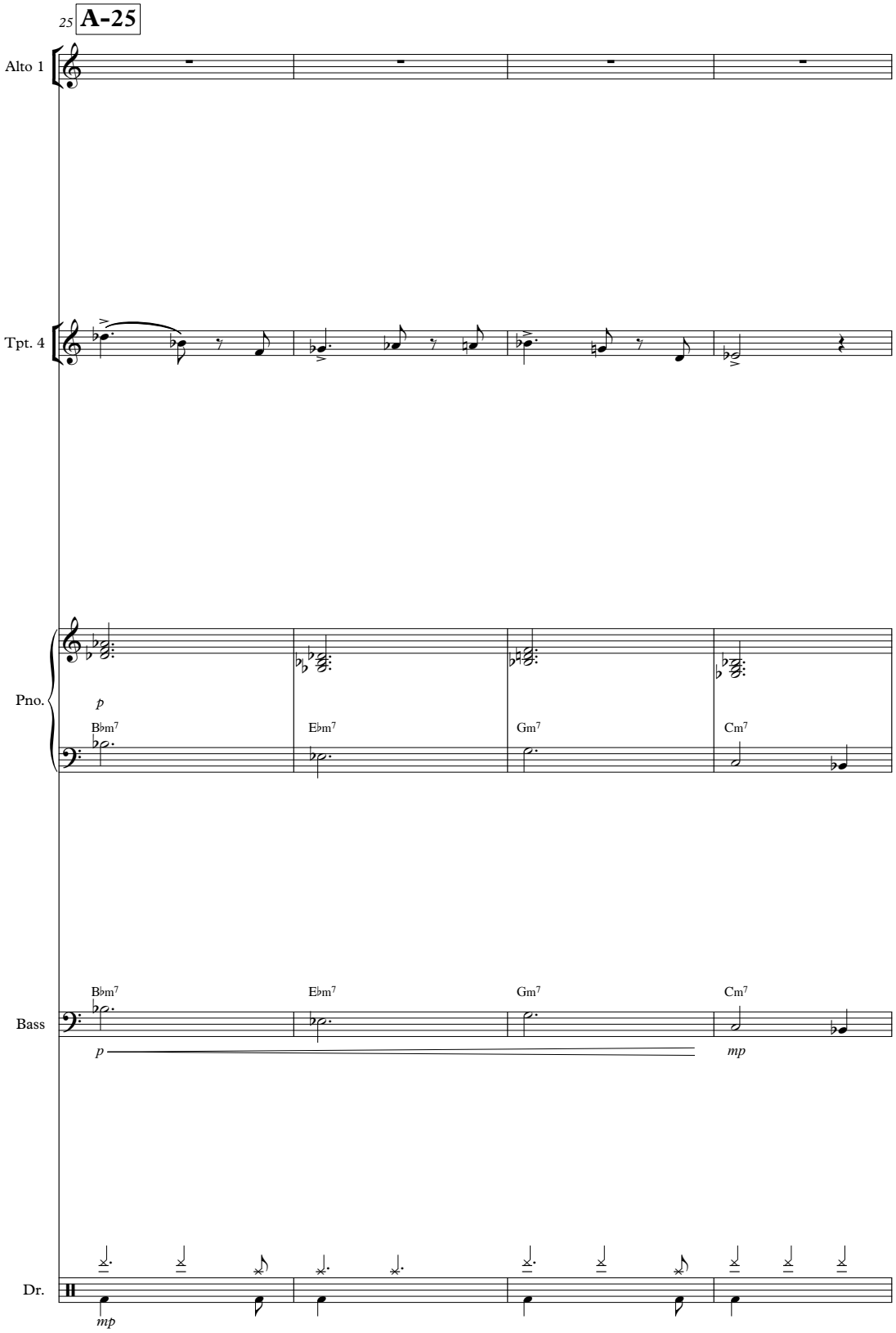

5
5
7
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
f
f
p
p
p
mp
p
Cm7
Em7
Cm7
Em7
p
pp

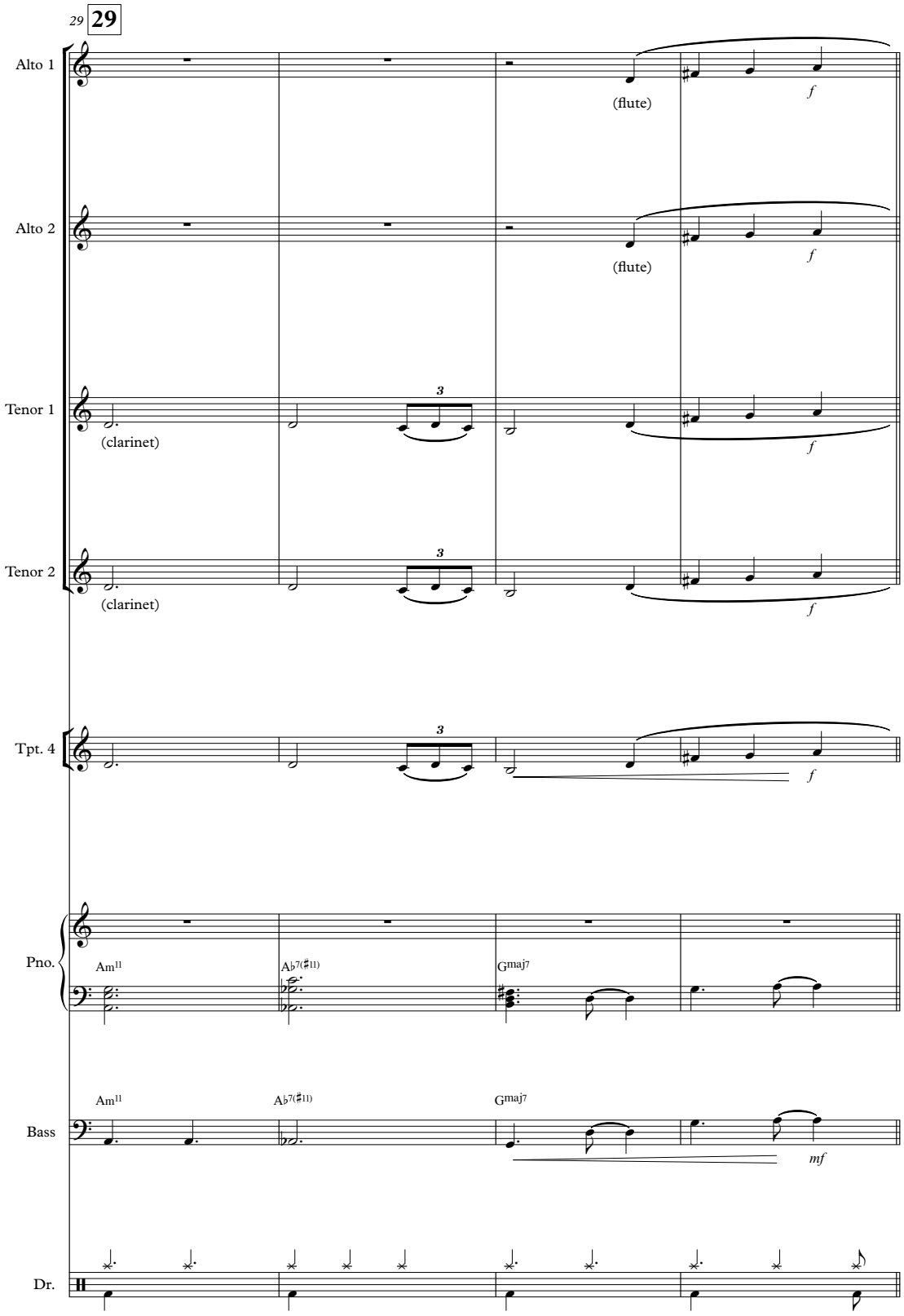

9
9
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
flugelhorn
harmon
harmon
Am7
Am7

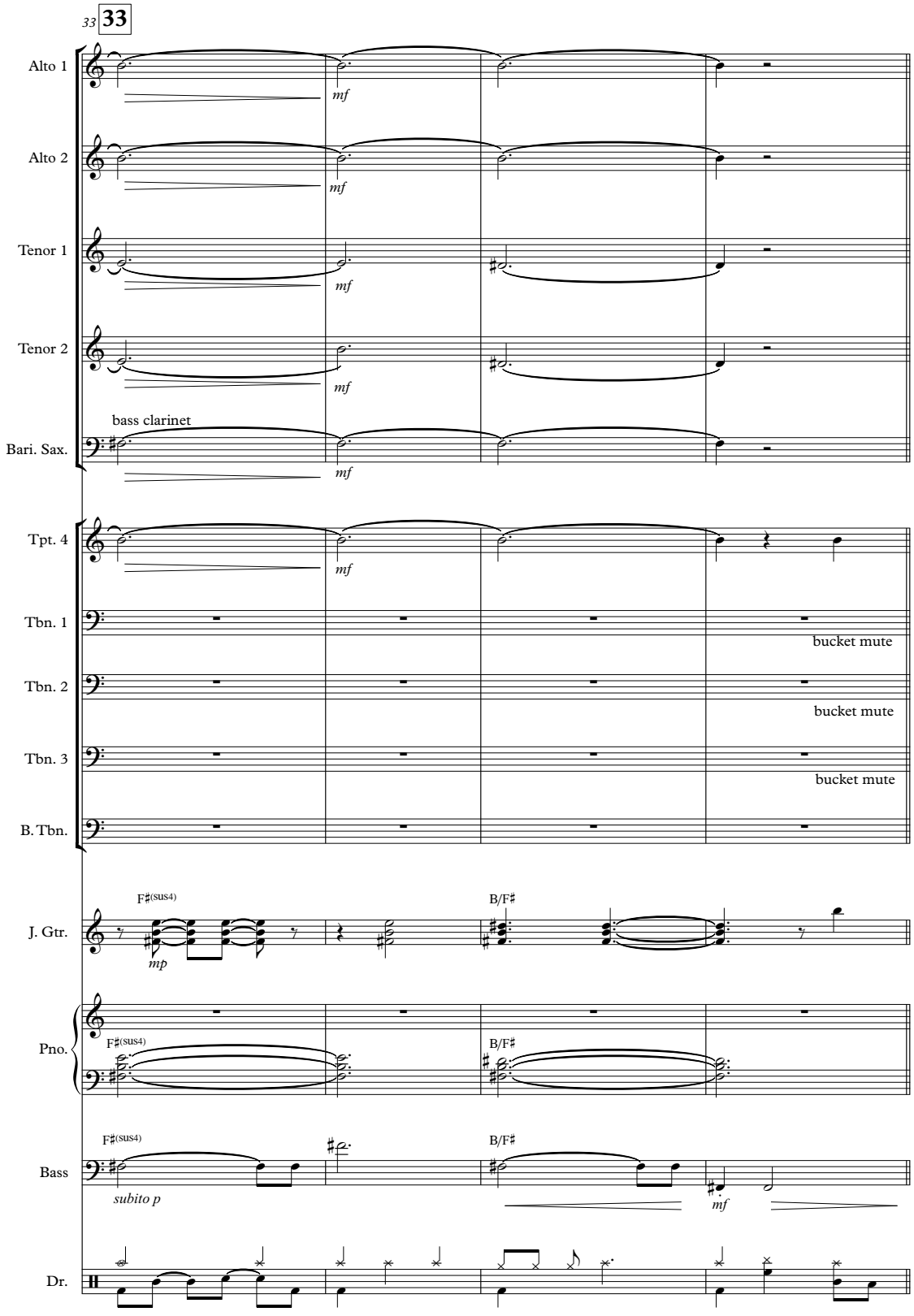

13
13
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 4
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
p
Flugelhorn
A♭maj7
F/G
G(sus4)
mp
8va
pp

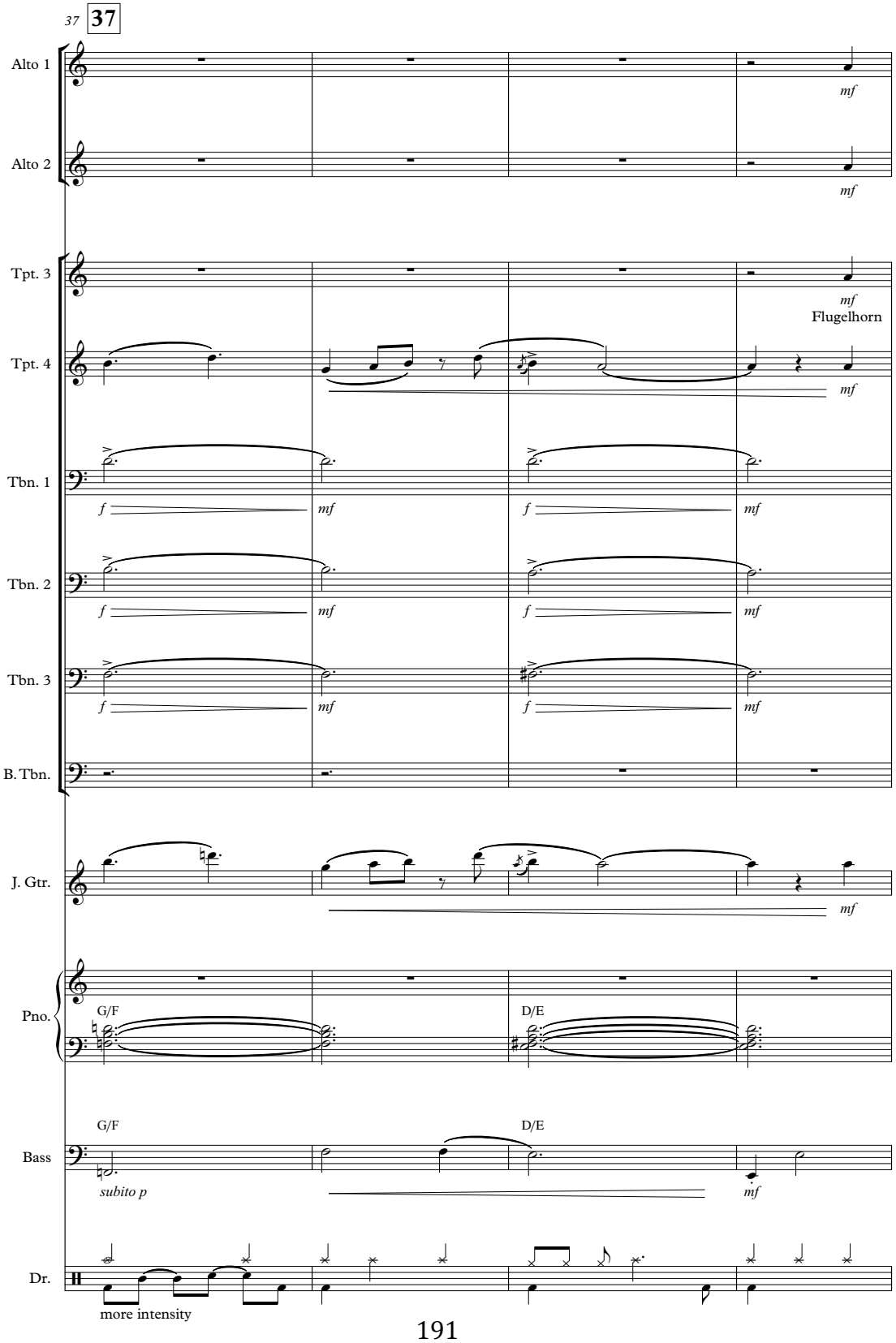

18
18
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 2
Tpt. 4
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
mf
mp
Cm7
Dm7
Em7
Fm7
jazz waltz

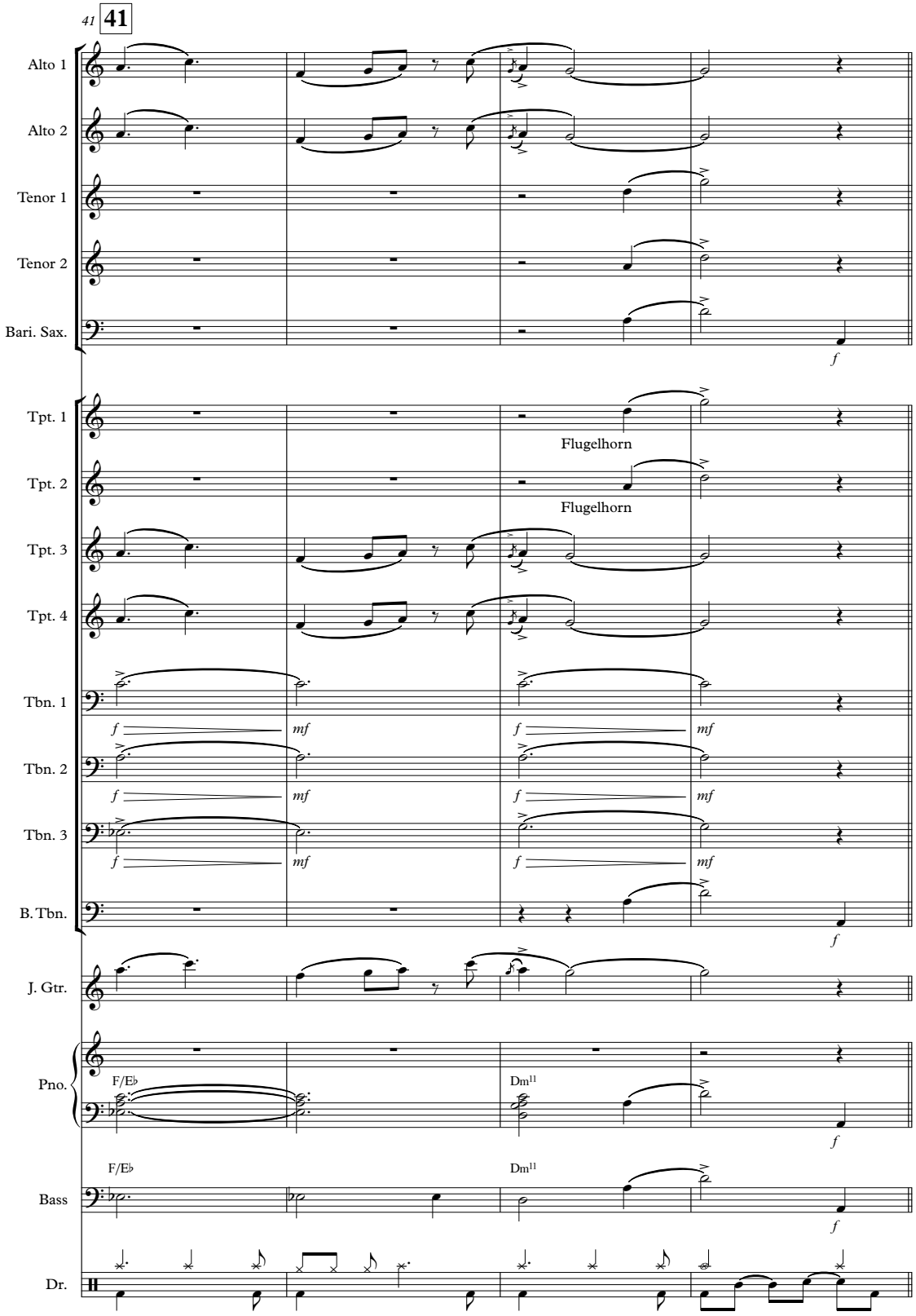

22
22
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 2
Tpt. 4
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
f
mf
Gm7
Am7
4
8vb

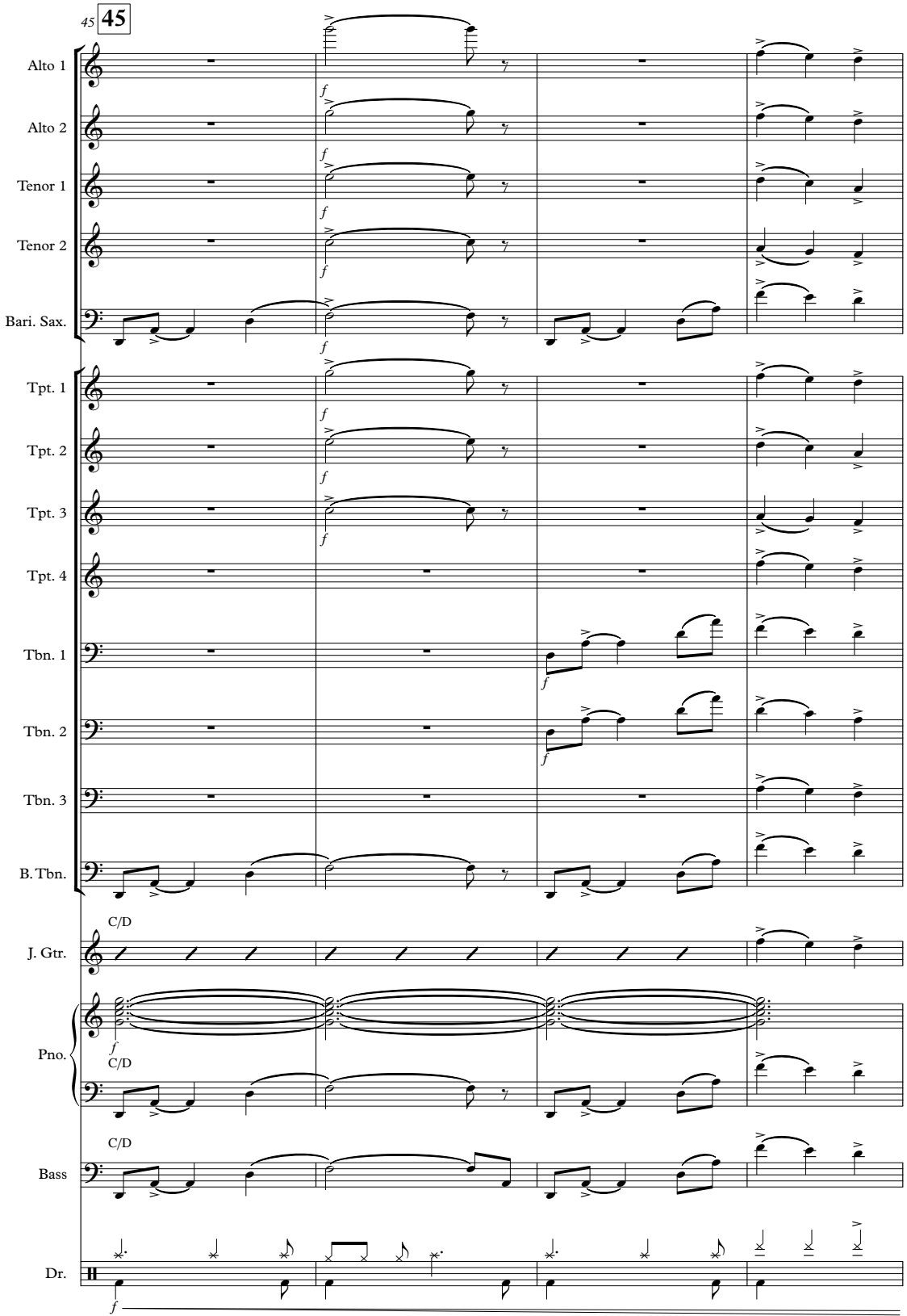

25
A-25
Alto 1
Tpt. 4
Pno.
p
B♭m7
E♭m7
Gm7
Cm7
Bass
p
mp
Dr.
mp

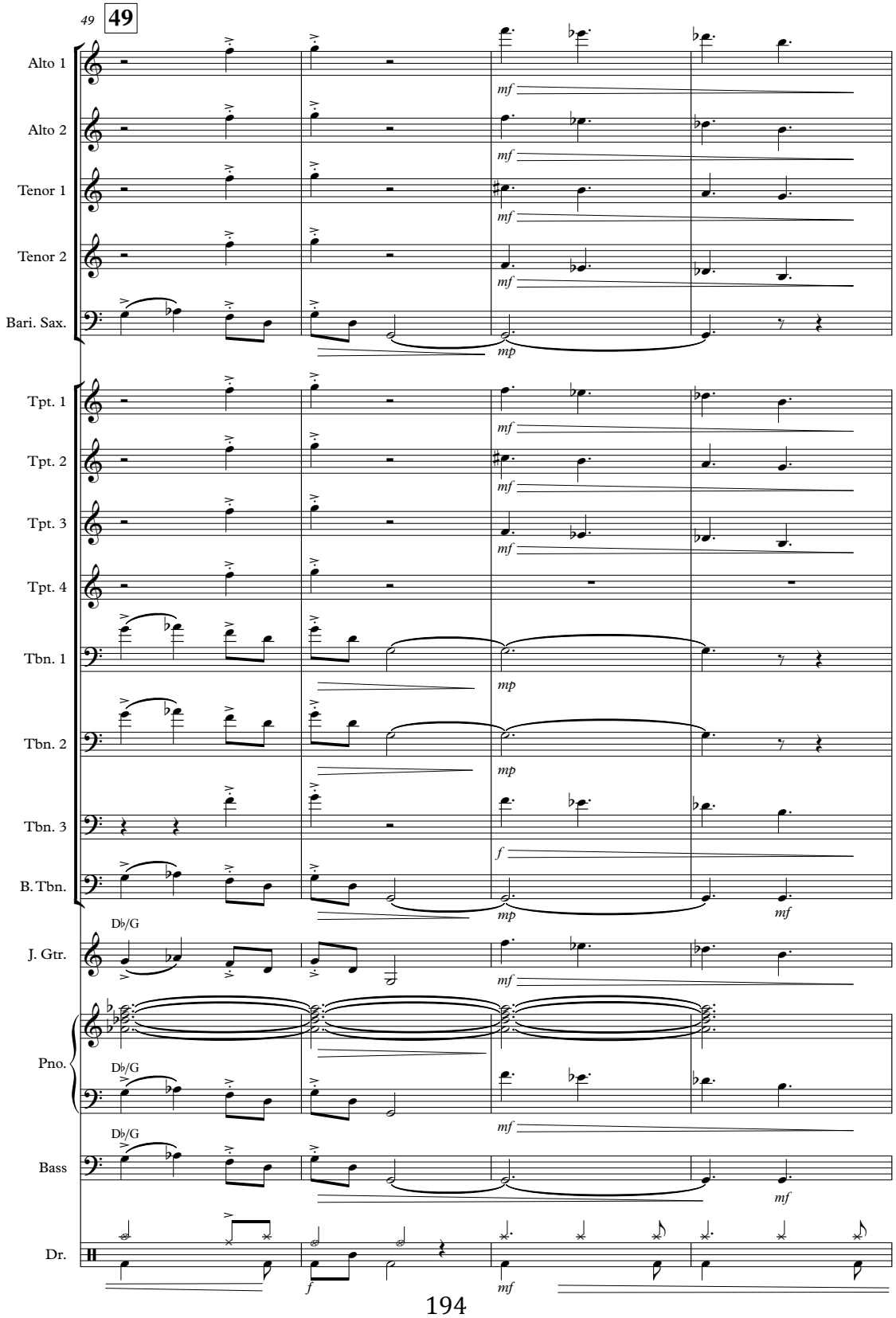

29
29
Alto 1
(flute)
f
Alto 2
(flute)
f
Tenor 1
(clarinet)
3
f
Tenor 2
(clarinet)
3
f
Tpt. 4
3
f
Pno.
Am11
Ab7(♯11)
Gmaj7
Bass
Am11
Ab7(♯11)
Gmaj7
mf
Dr.

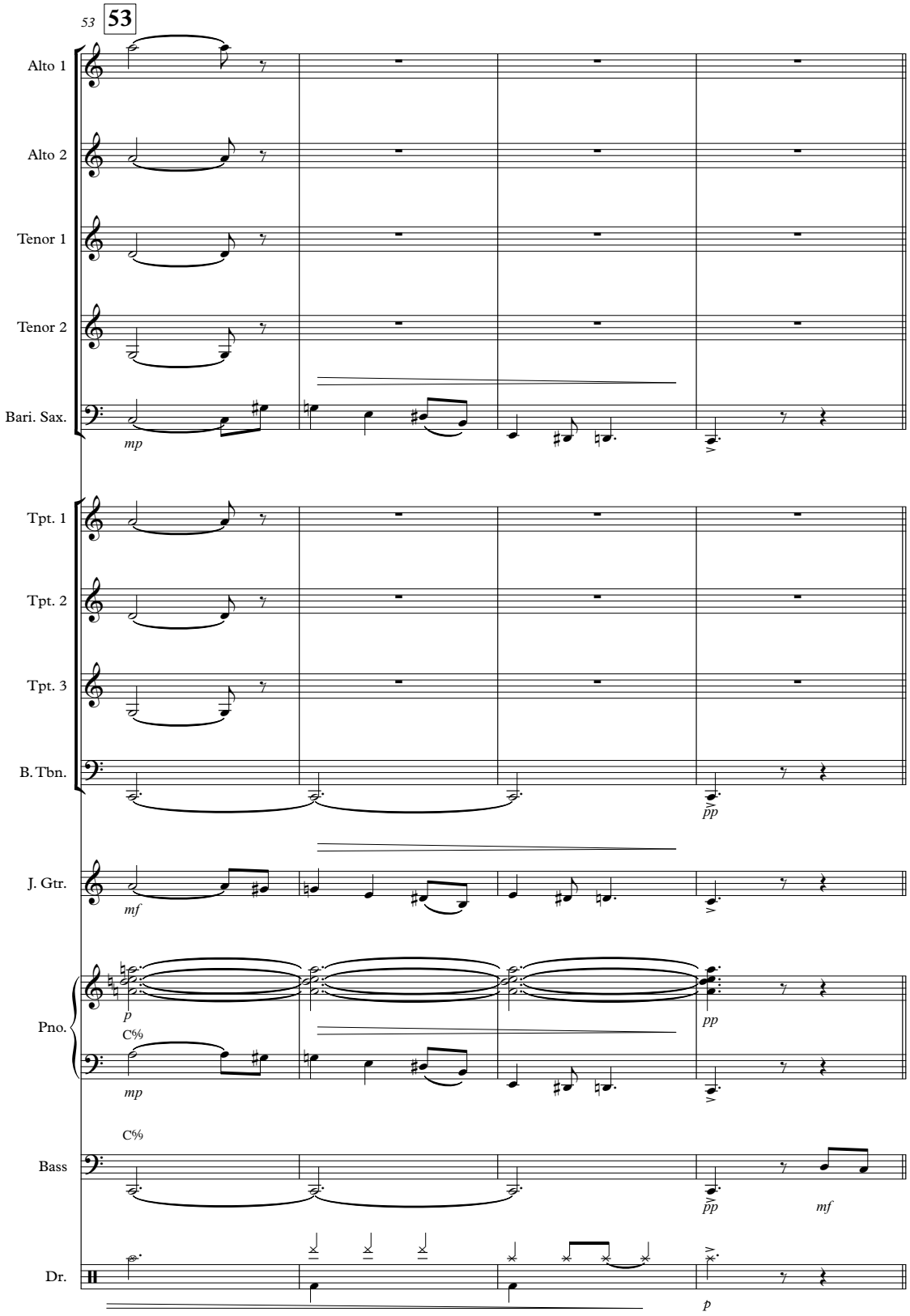

33
33
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
bass clarinet
mf
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
bucket mute
J. Gtr.
F♯(sus4)
B/F♯
mp
Pno.
Bass
subito p
Dr.

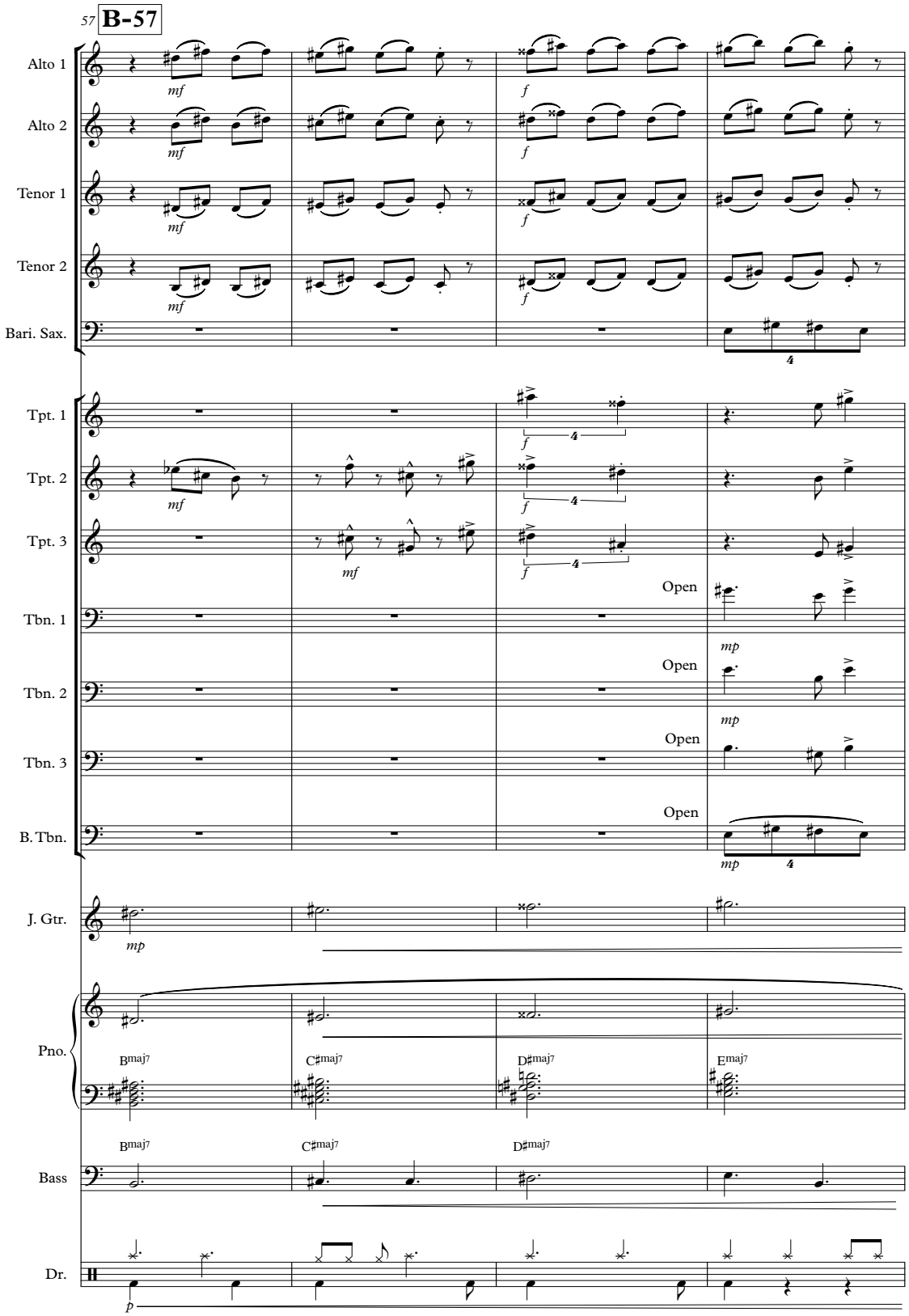

37
37
Alto 1
mf
Alto 2
mf
Tpt. 3
mf
Flugelhorn
Tpt. 4
mf
Tbn. 1
f
mf
f
mf
Tbn. 2
f
mf
f
mf
Tbn. 3
f
mf
f
mf
B. Tbn.
J. Gtr.
mf
Pno.
G/F
D/E
Bass
G/F
D/E
subito p
mf
Dr.
more intensity

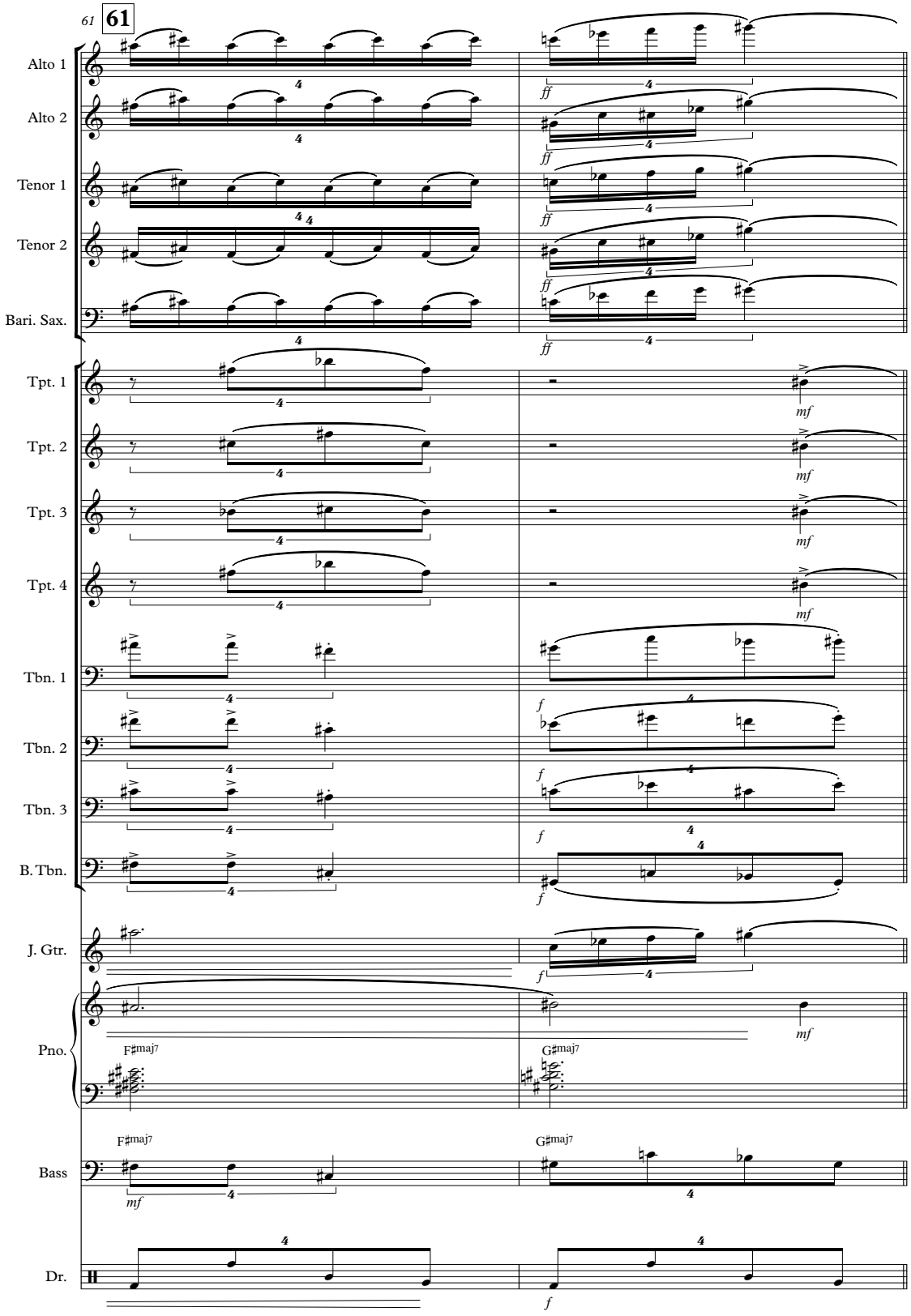

41
41
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
f
Tpt. 1
Flugelhorn
Tpt. 2
Flugelhorn
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
f
mf
B. Tbn.
J. Gtr.
Pno.
F/E♭
Dm11
Bass
Dr.

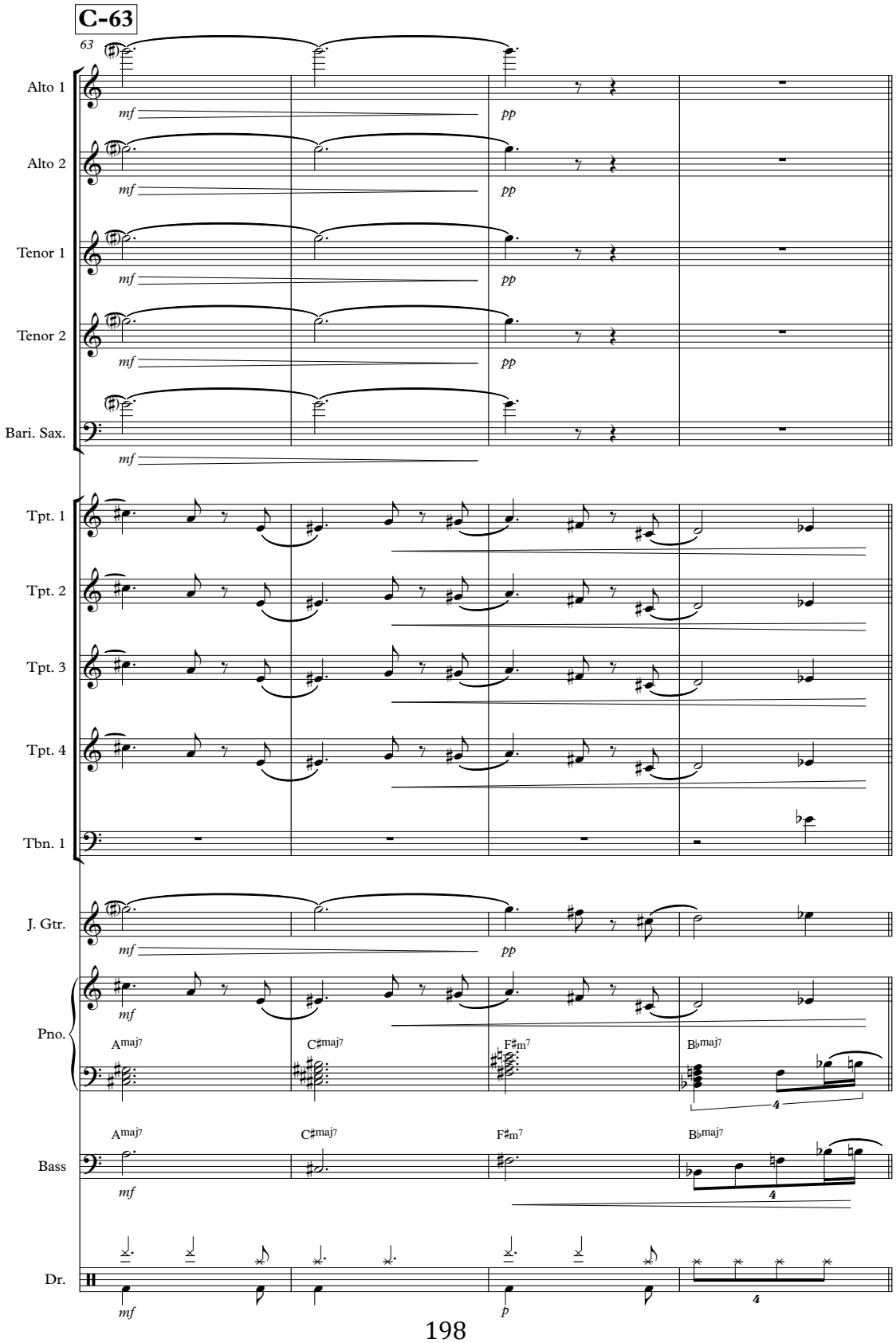

45
45
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
C/D
Pno.
C/D
Bass
C/D
Dr.
f

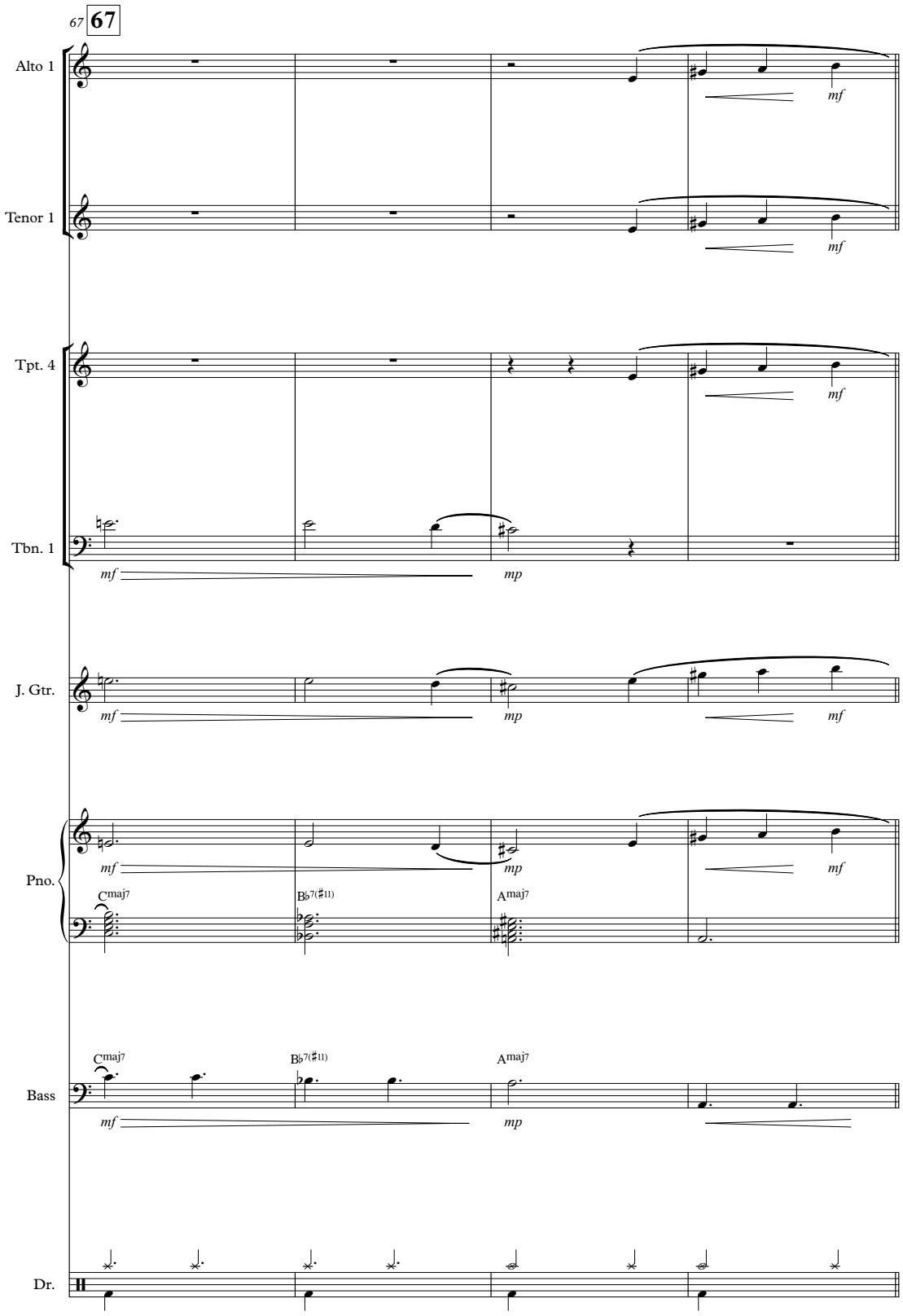

49
49
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
Db/G
mf
mp
f

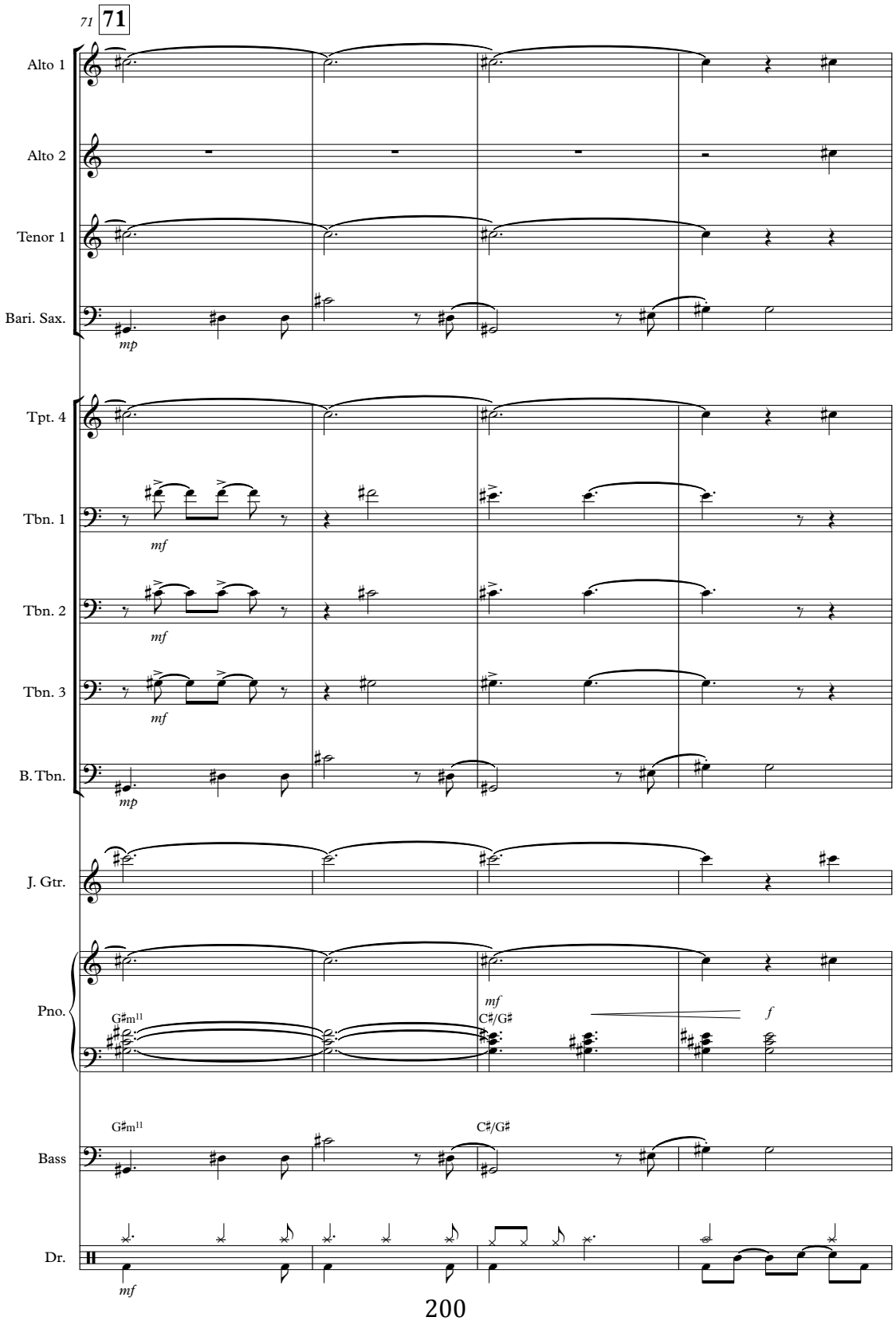

53
53
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
mp
Tpt. 1
Tpt. 2
Tpt. 3
B. Tbn.
pp
J. Gtr.
mf
Pno.
p
pp
C%
mp
C%
Bass
pp
mf
Dr.
p

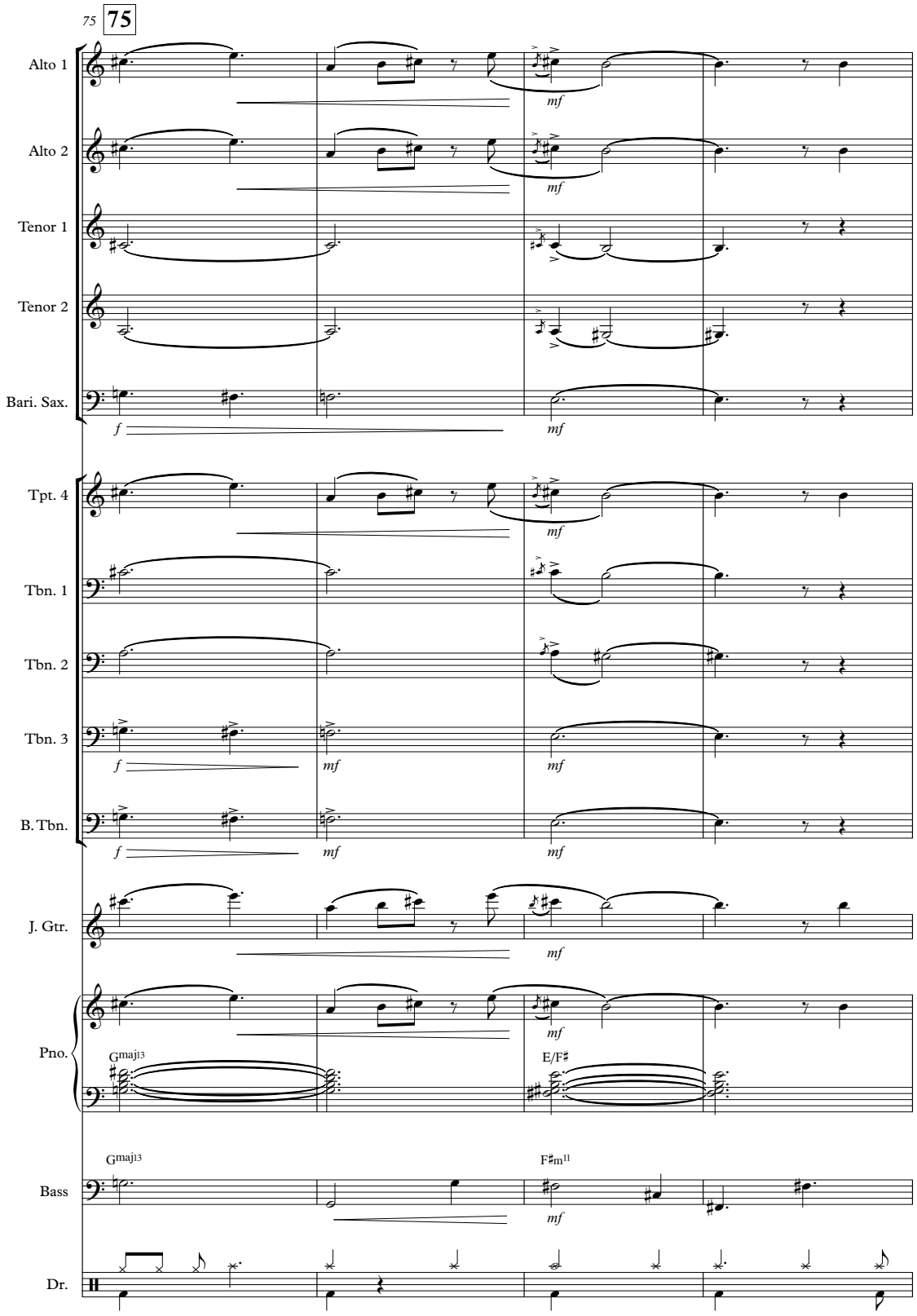

57
B-57
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
f
mp
p
Open
Bmaj7
C♯maj7
D♯maj7
Emaj7

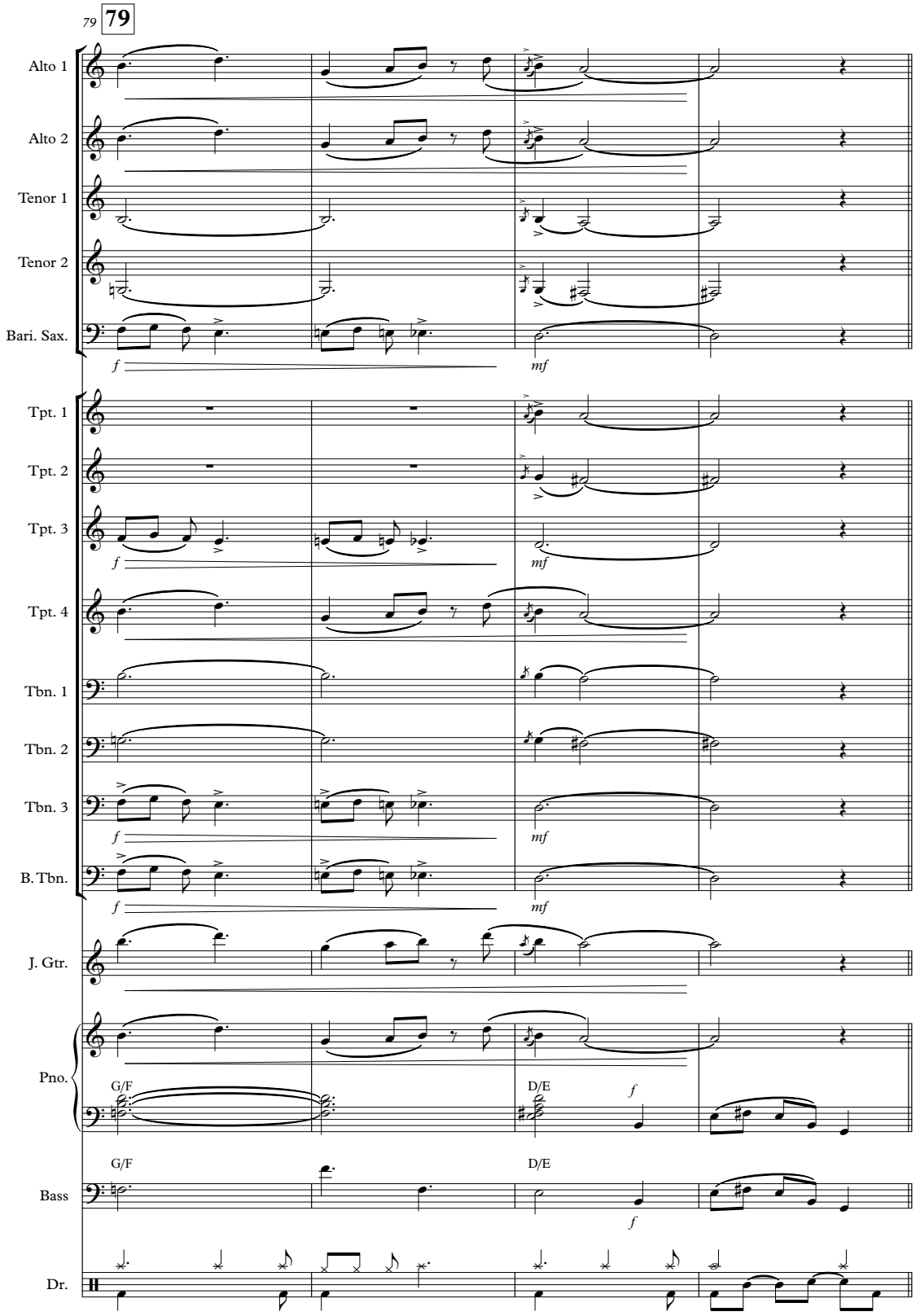

61
61
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
F♯maj7
G♯maj7
ff
mf
f

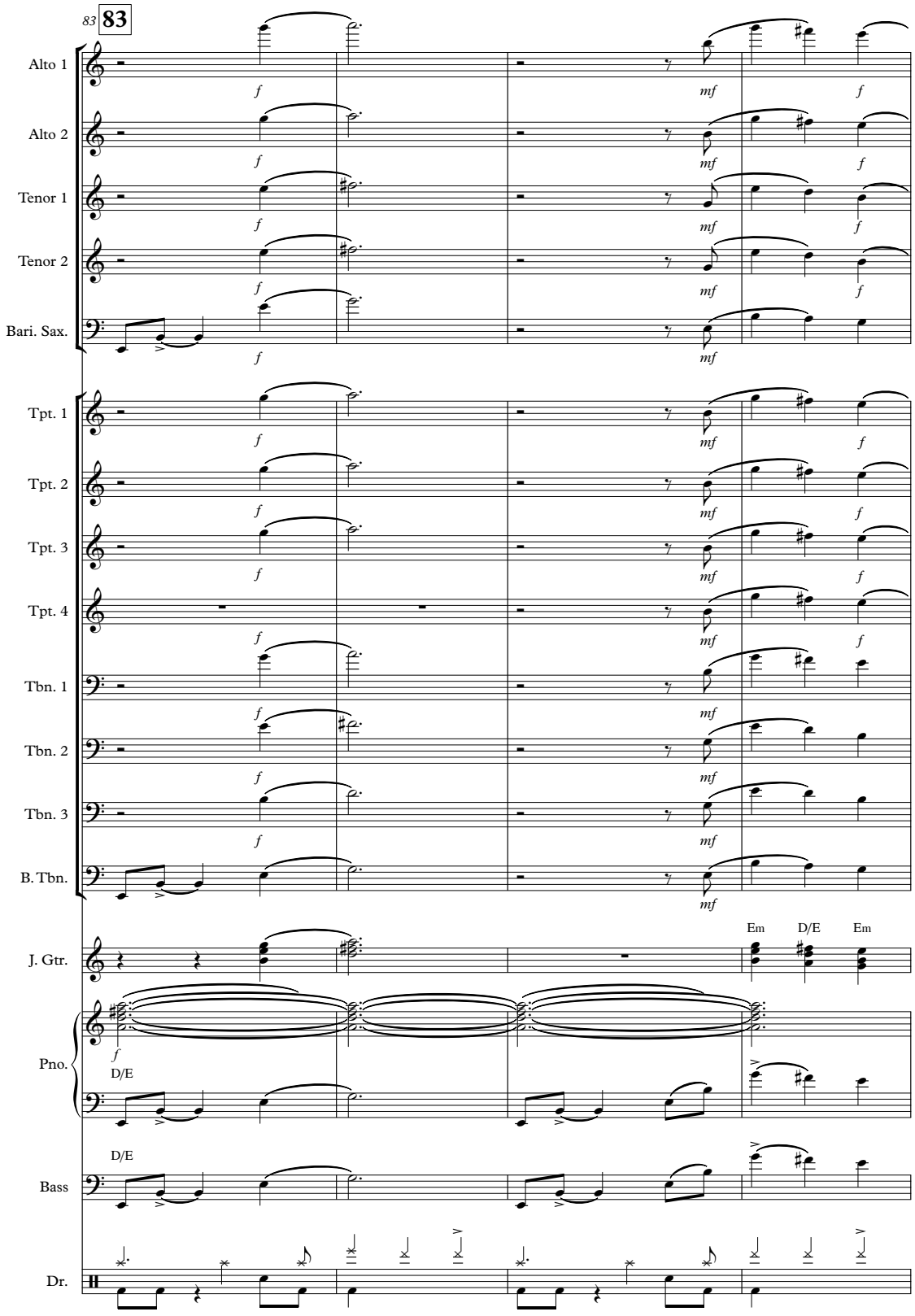

C-63
63
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
mf
pp
p
Amaj7
C♯maj7
F♯m7
B♭maj7
4

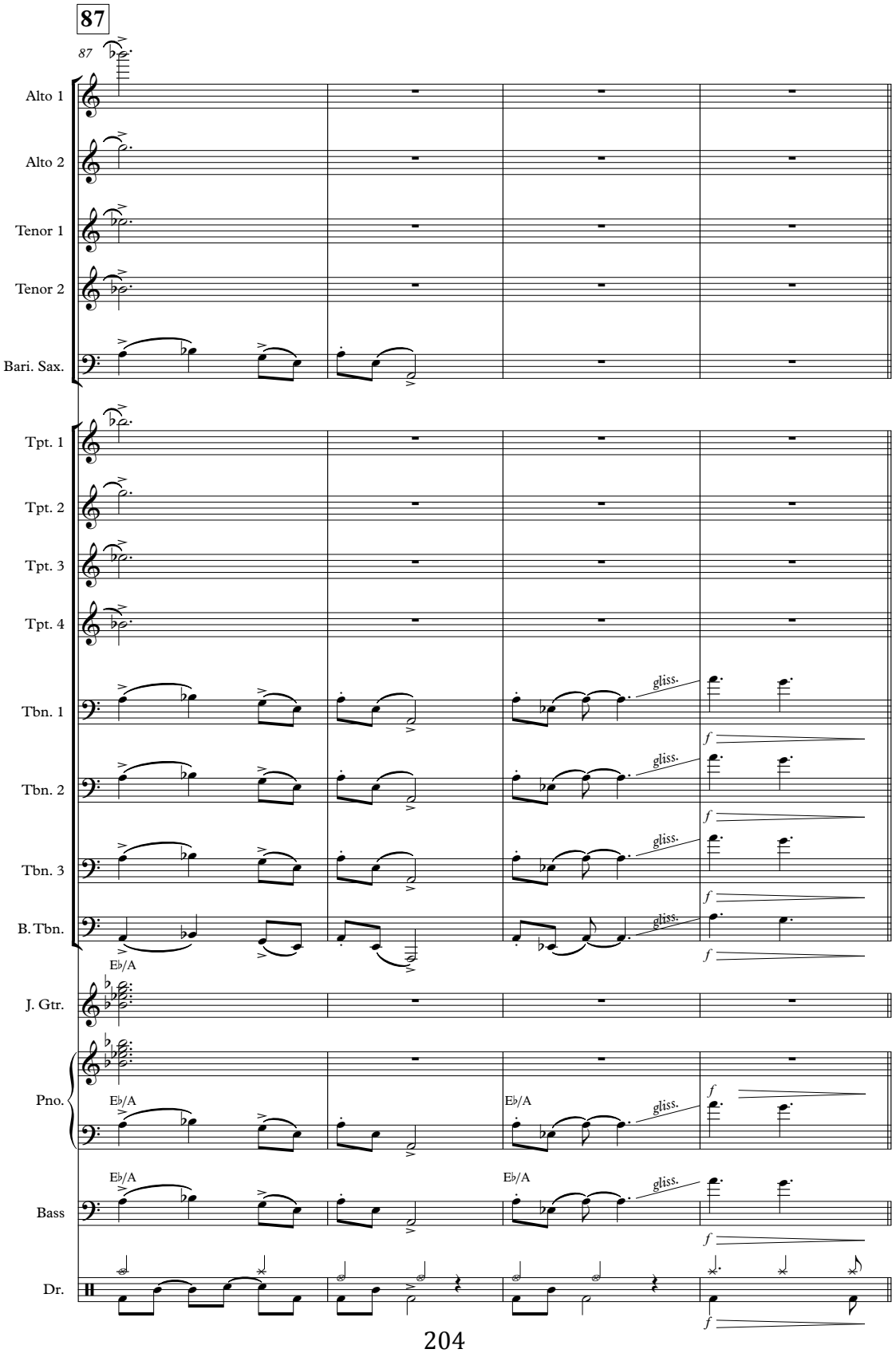

67
67
Alto 1
Tenor 1
Tpt. 4
Tbn. 1
J. Gtr.
Pno.
Bass
Dr.
mf
mp
Cmaj7
B♭7(♯11)
Amaj7

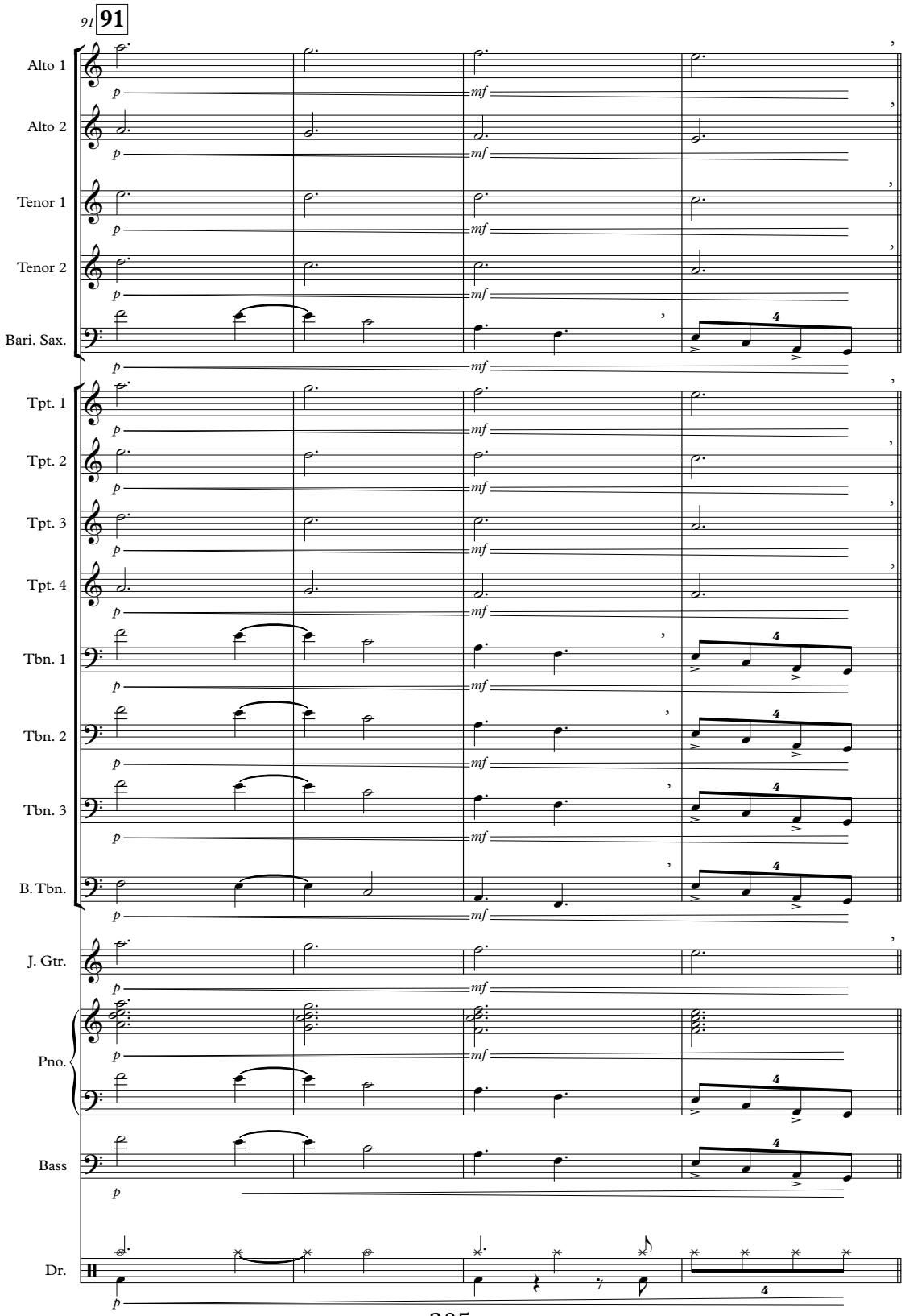

71
71
Alto 1
Alto 2
Tenor 1
Bari. Sax.
mp
Tpt. 4
Tbn. 1
mf
Tbn. 2
mf
Tbn. 3
mf
B. Tbn.
mp
J. Gtr.
Pno.
G♯m11
mf
C♯/G♯
f
Bass
G♯m11
C♯/G♯
Dr.
mf

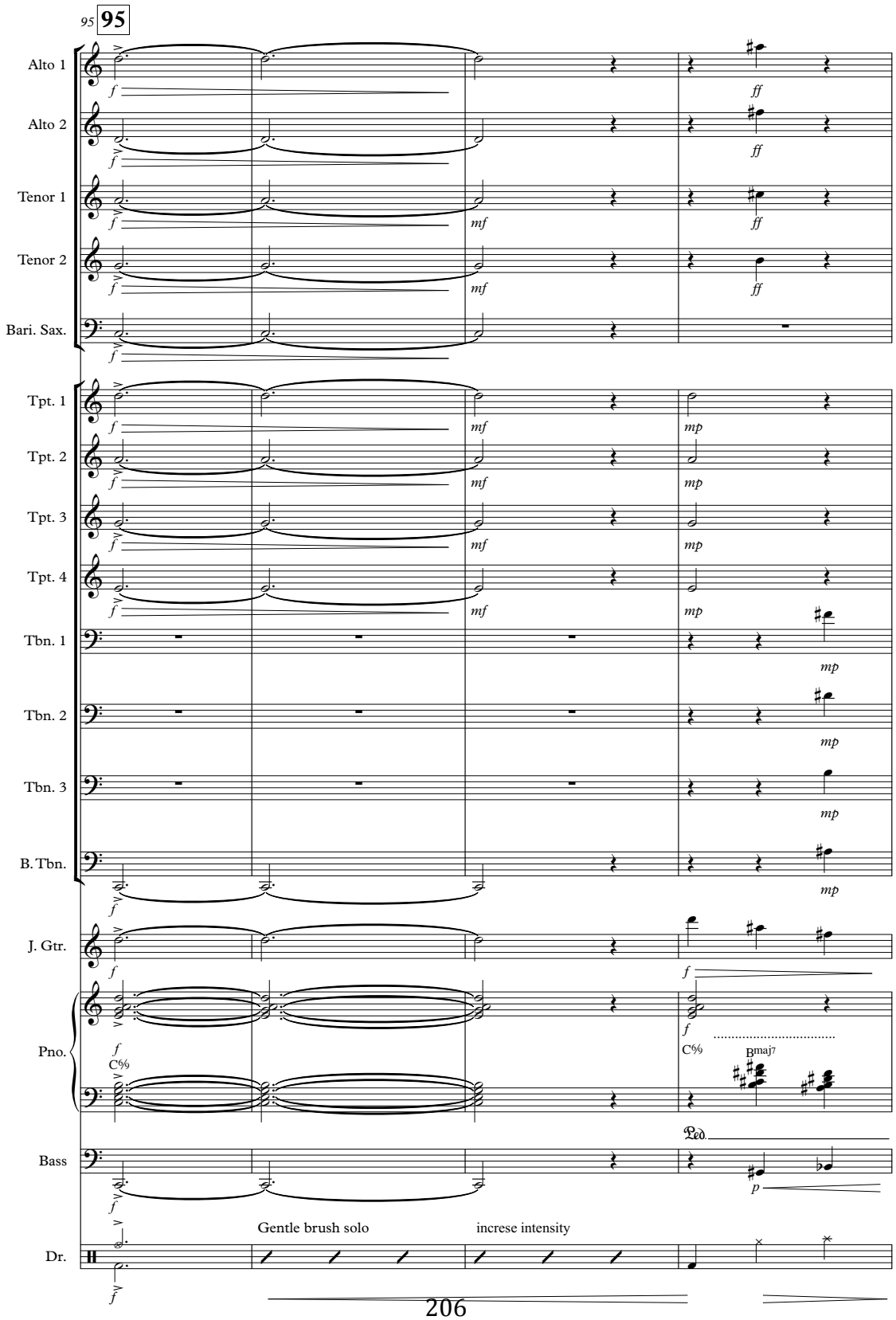

75
75
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
f
Gmaj13
E/F♯
F♯m11

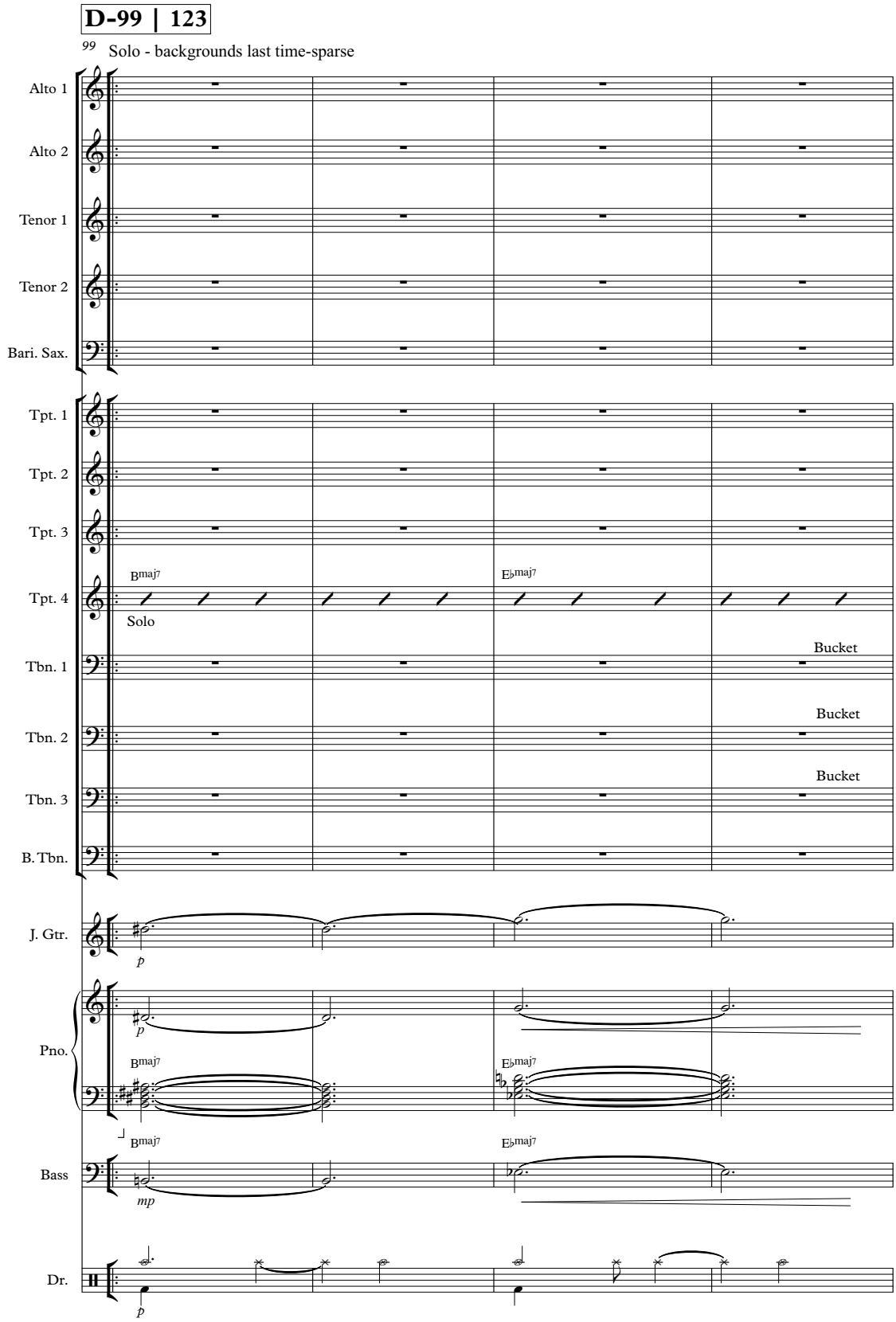

79
79
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
f
mf
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
G/F
D/E
Bass
Dr.

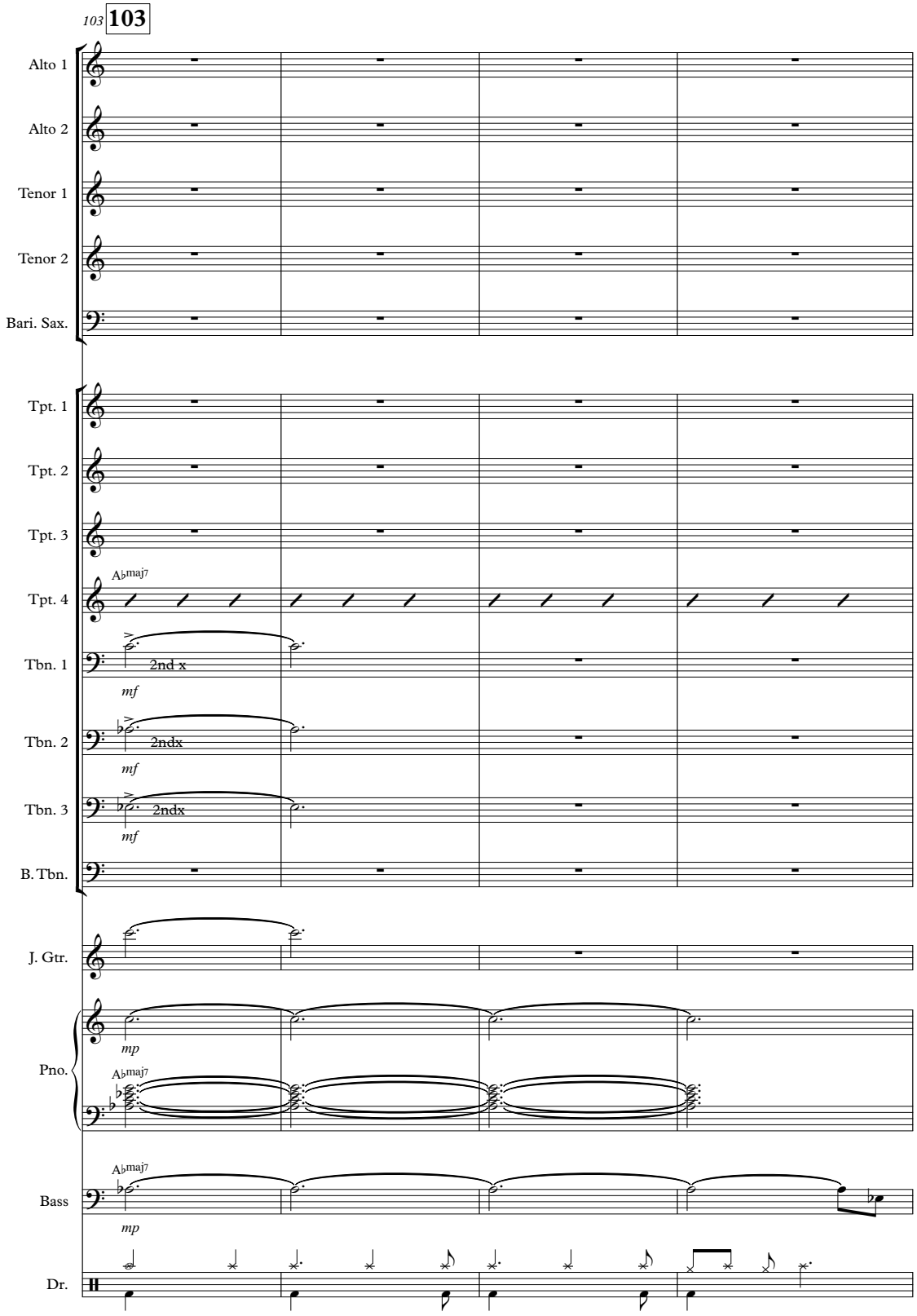

83
83
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Em
D/E
Em
Pno.
D/E
D/E
Bass
Dr.

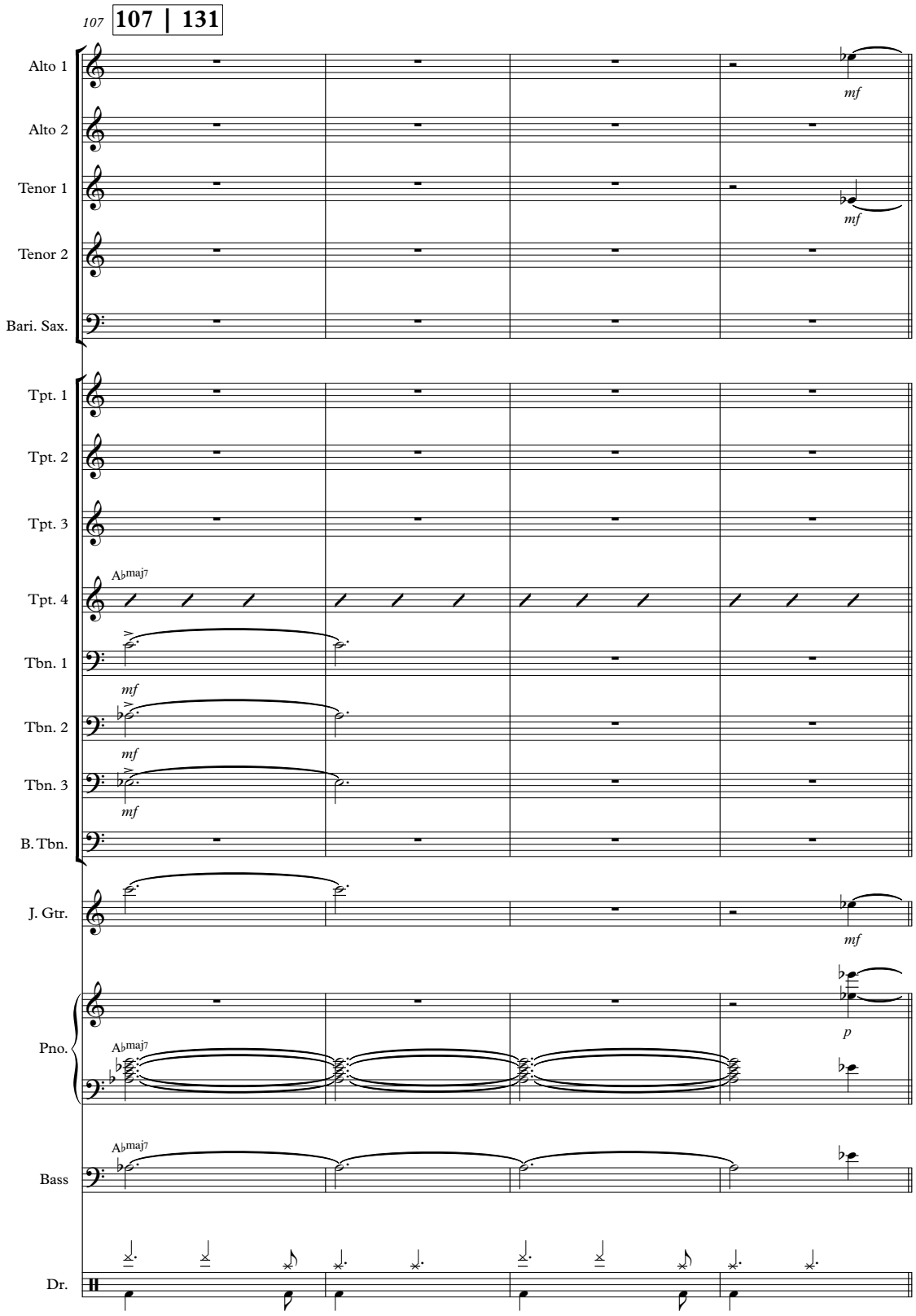

87
87
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
gliss.
f
E♭/A
J. Gtr.
Pno.
Bass
Dr.

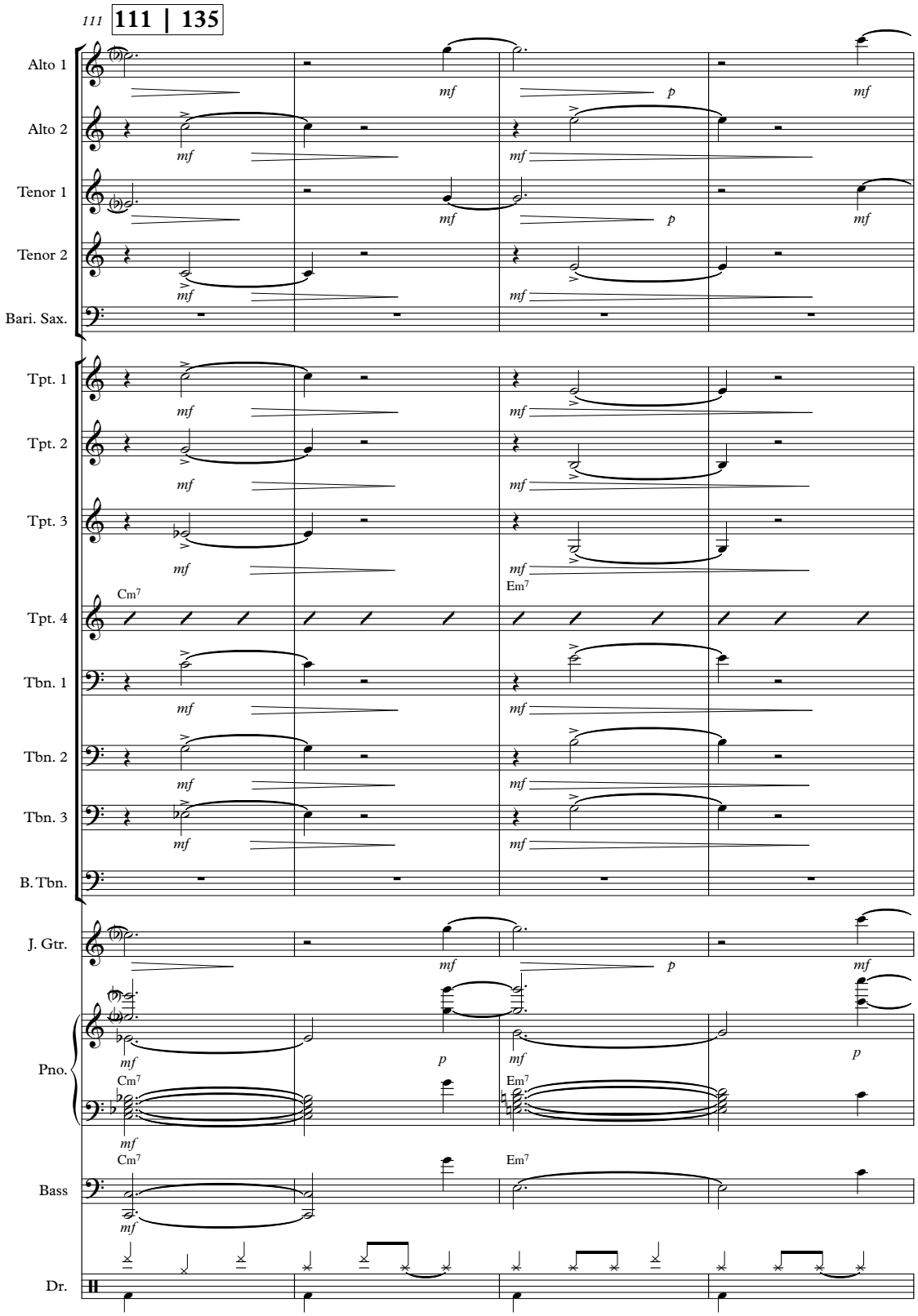

91
91
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
p
mf
4

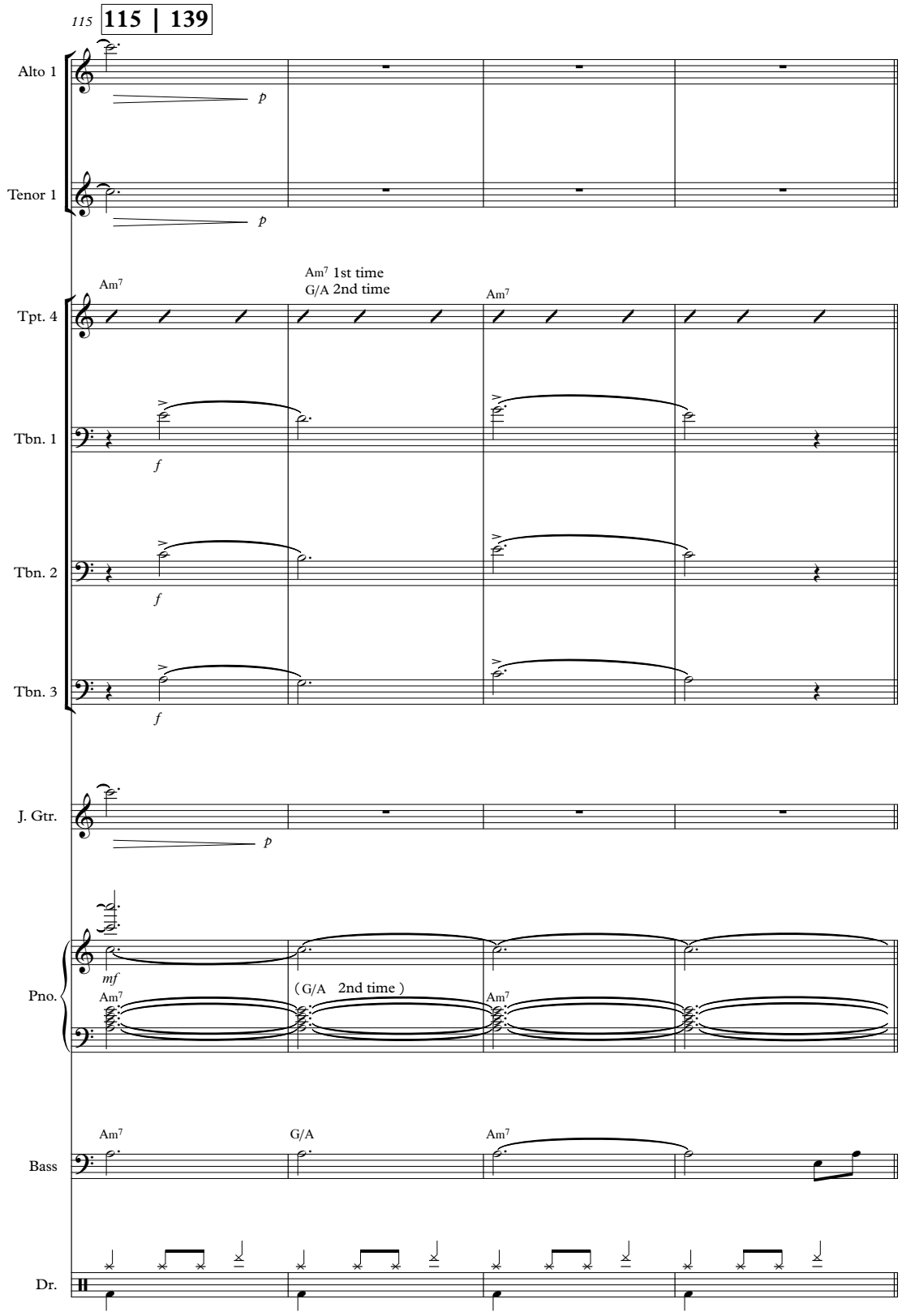

95
95
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
C%
Bmaj7
Ped.
Gentle brush solo
increse intensity

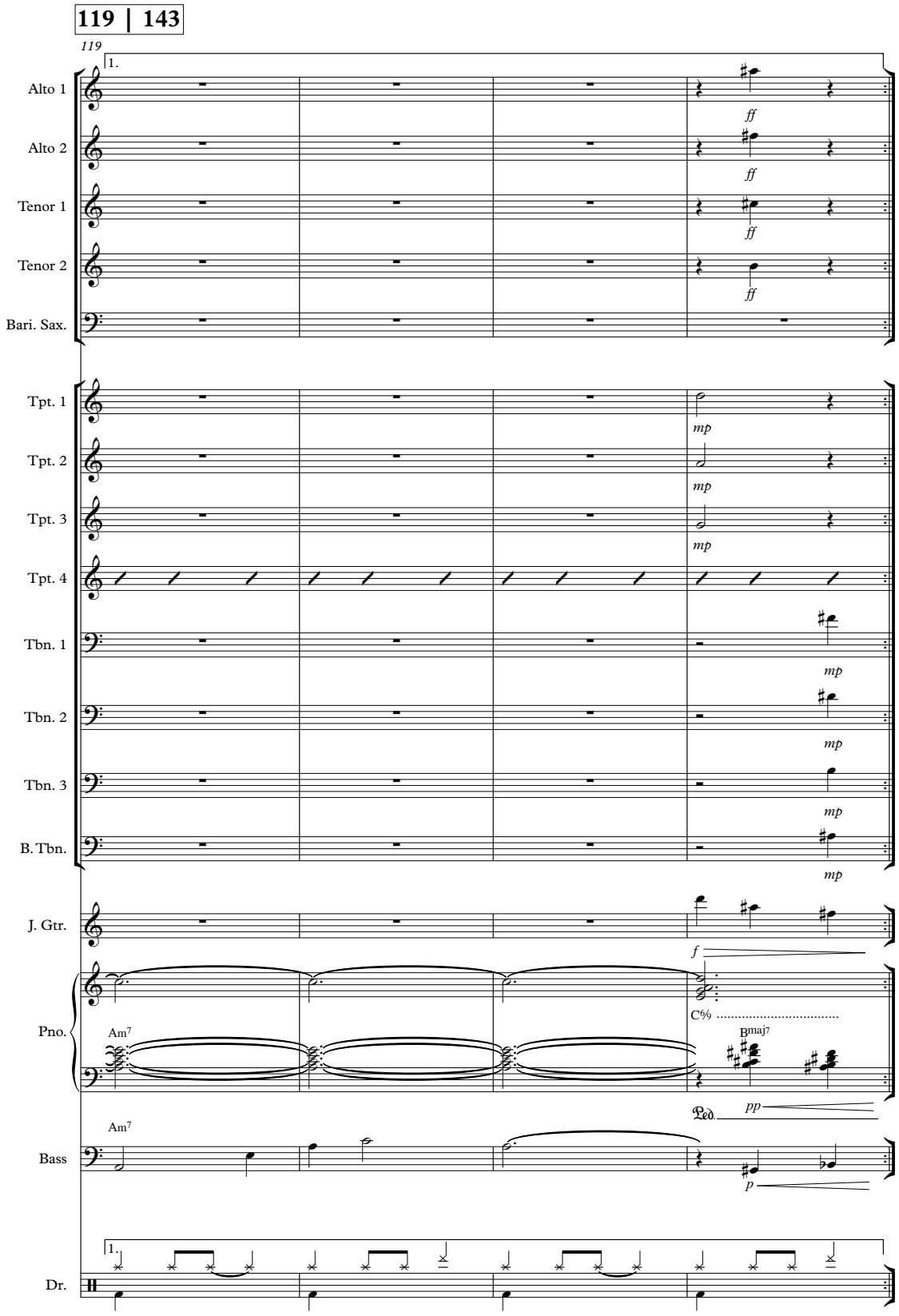

D-99 | 123
99
Solo - backgrounds last time-sparse
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
Bmaj7
E♭maj7
Solo
Bucket
Bucket
Bucket
p
mp

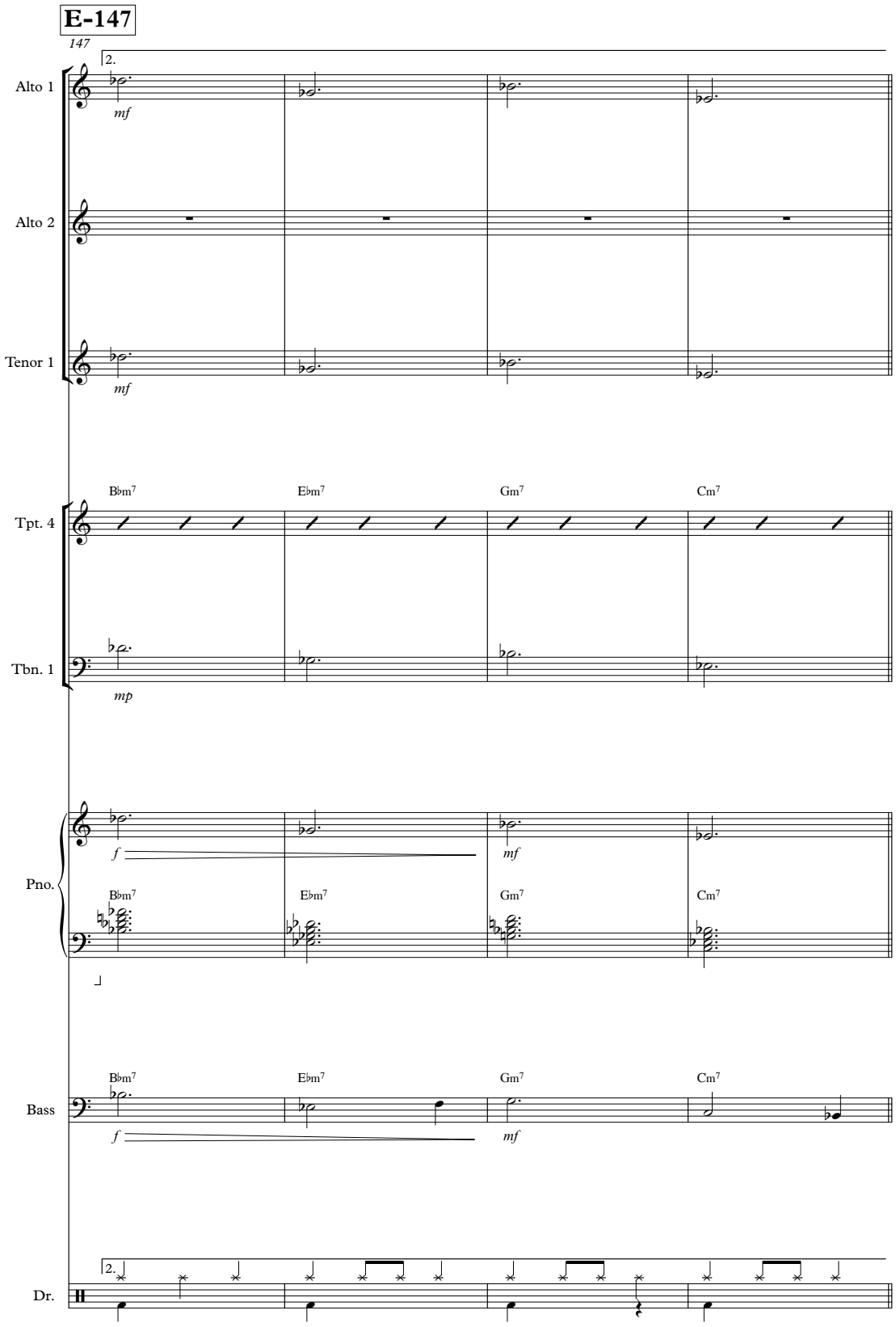

103
103
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
A♭maj7
2nd x
2ndx
2ndx
mf
mf
mf
mp
mp

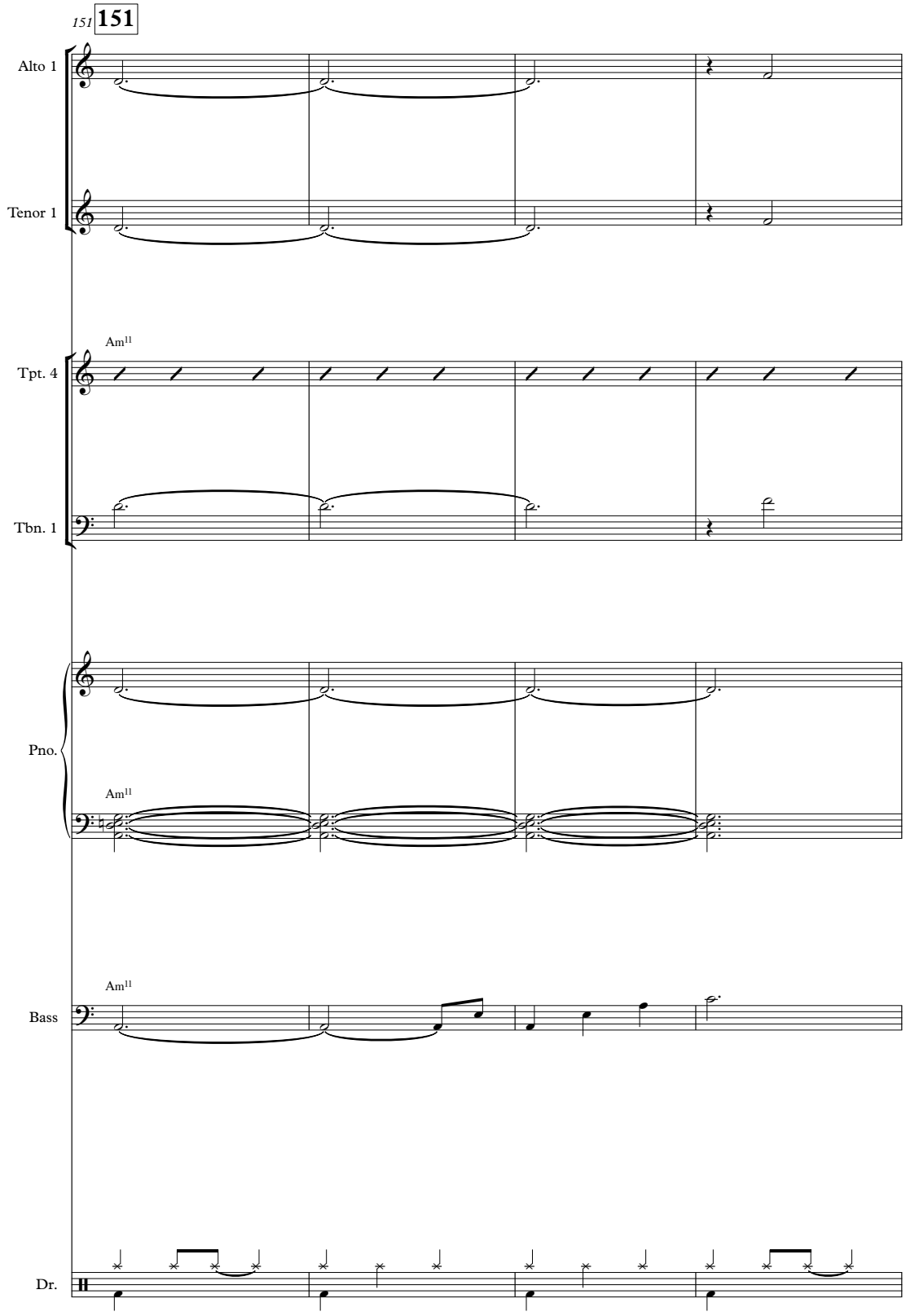

107
107 | 131
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
p
A♭maj7

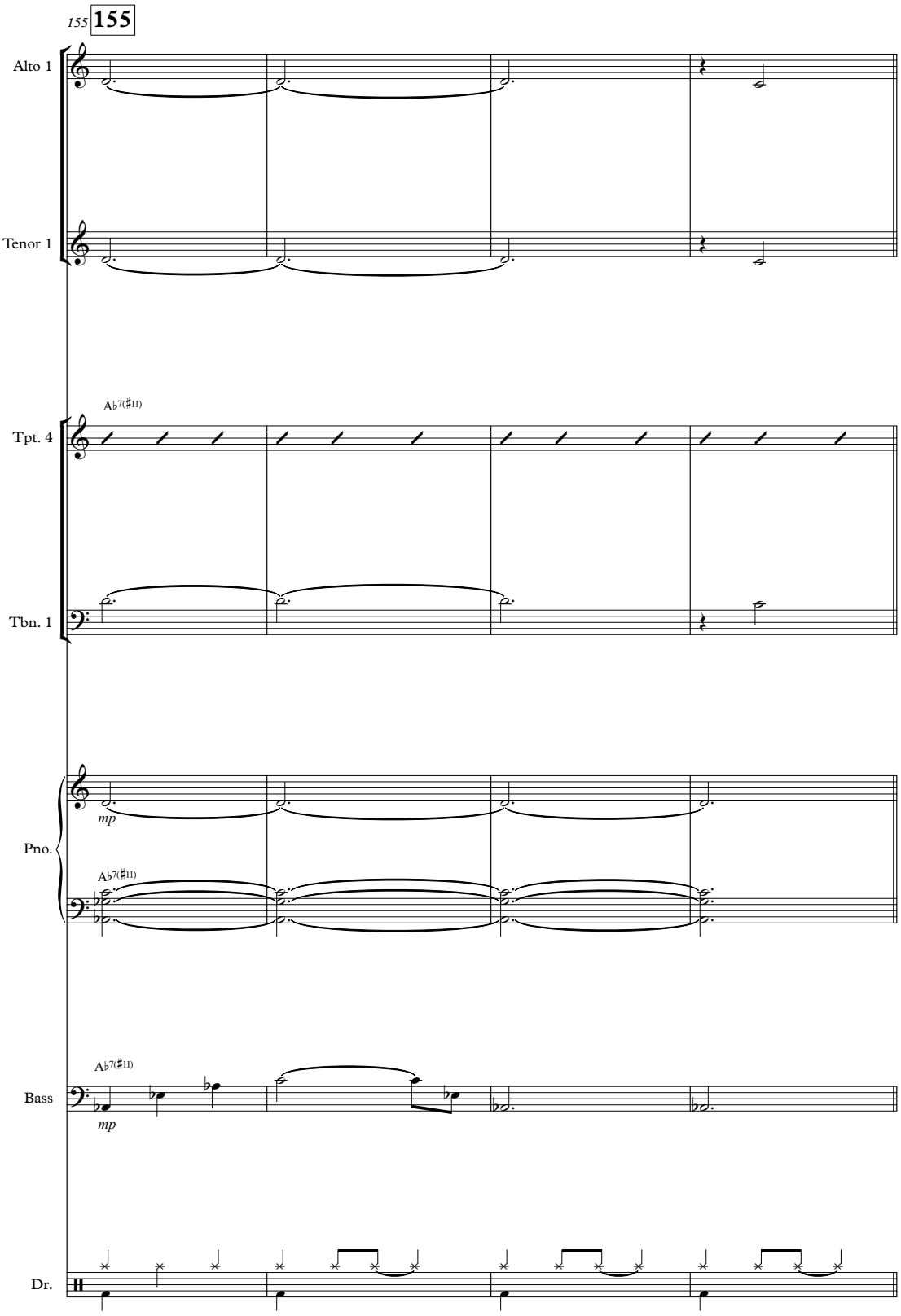

111
111 | 135
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
p
Cm7
Em7

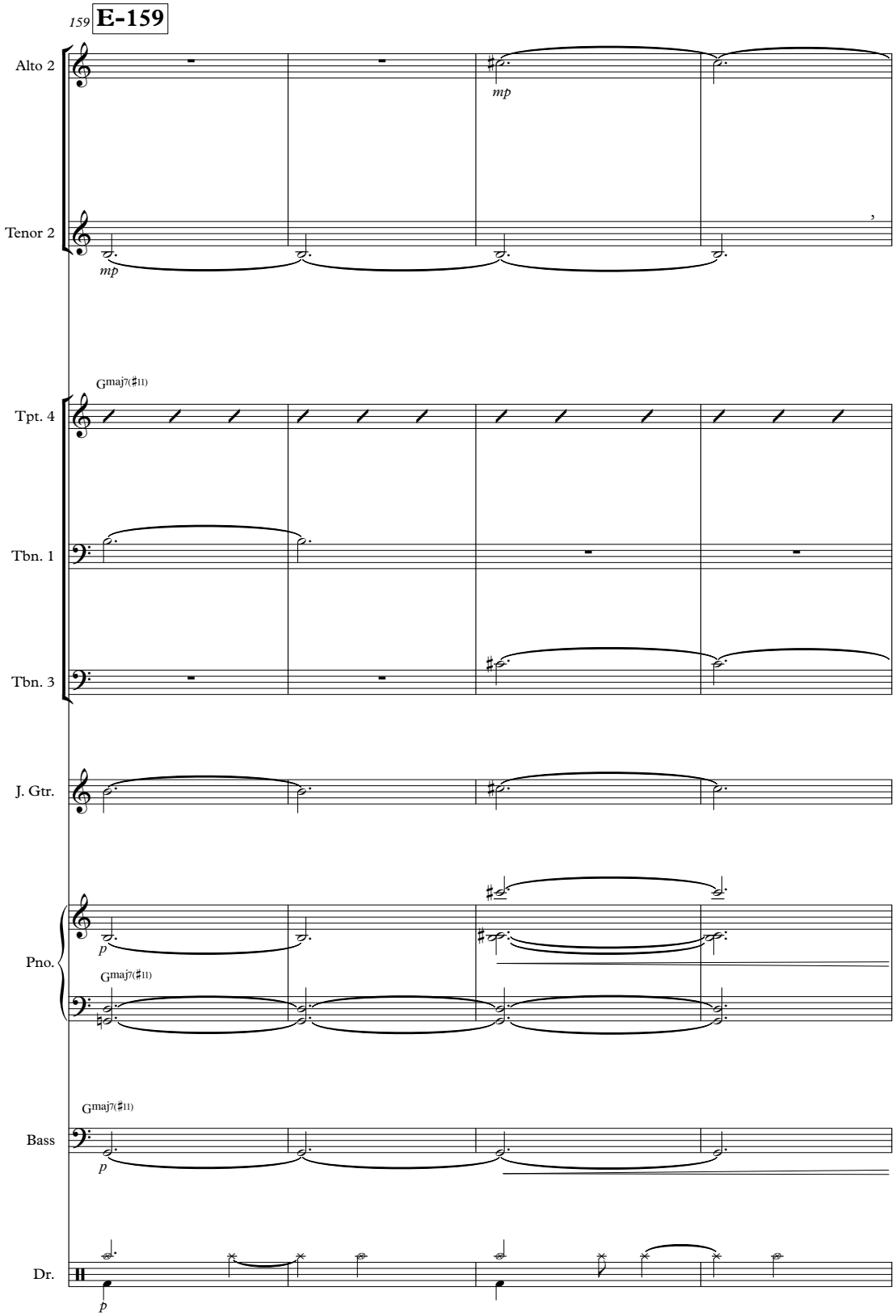

115
115 | 139
Alto 1
Tenor 1
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
J. Gtr.
Pno.
Bass
Dr.
Am7
Am7 1st time
G/A 2nd time
Am7
Am7
G/A
Am7
(G/A 2nd time)
p
f
mf

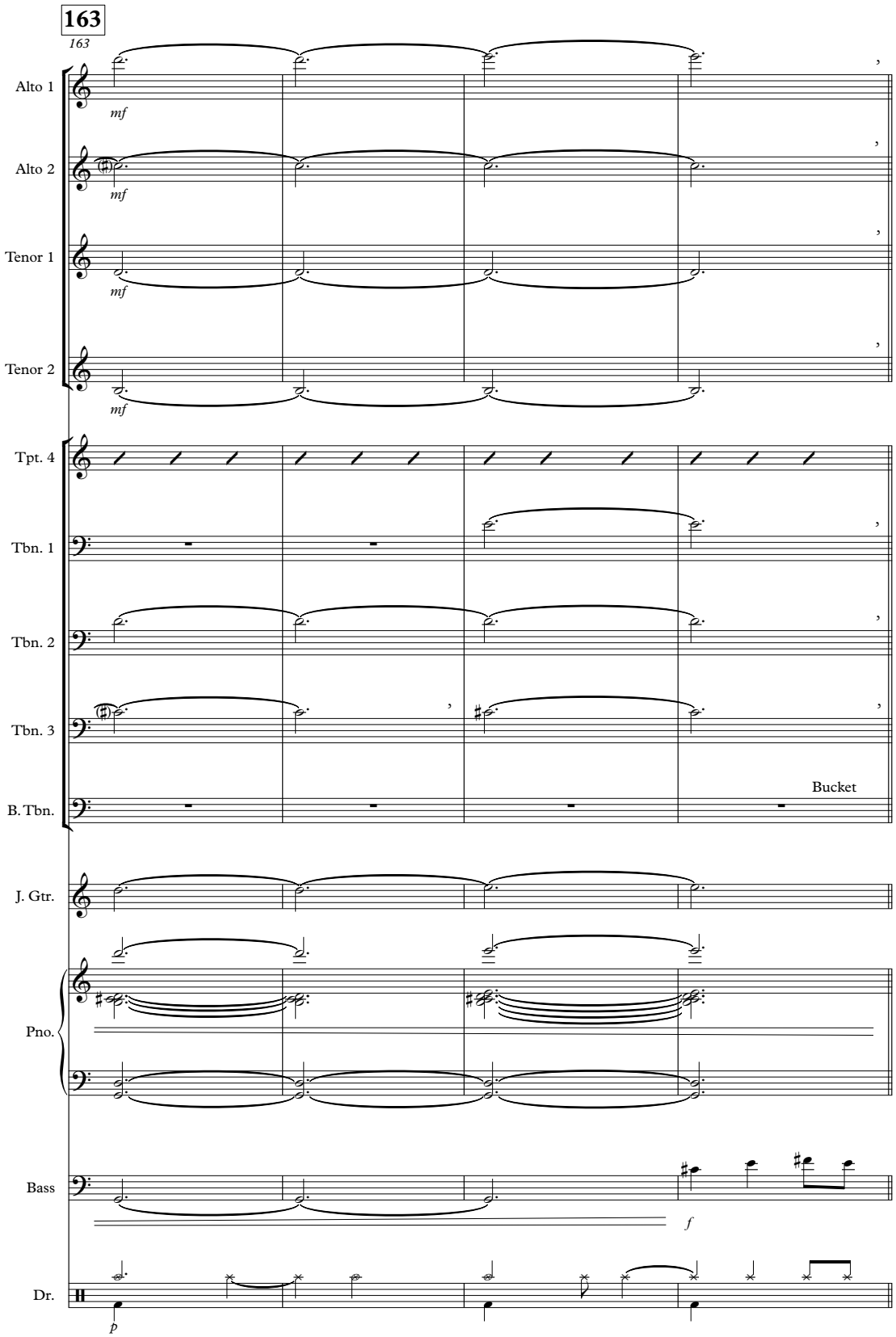

119 | 143
119
1.
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
ff
mp
f
pp
p
Am7
C6/9
Bmaj7
Ped.

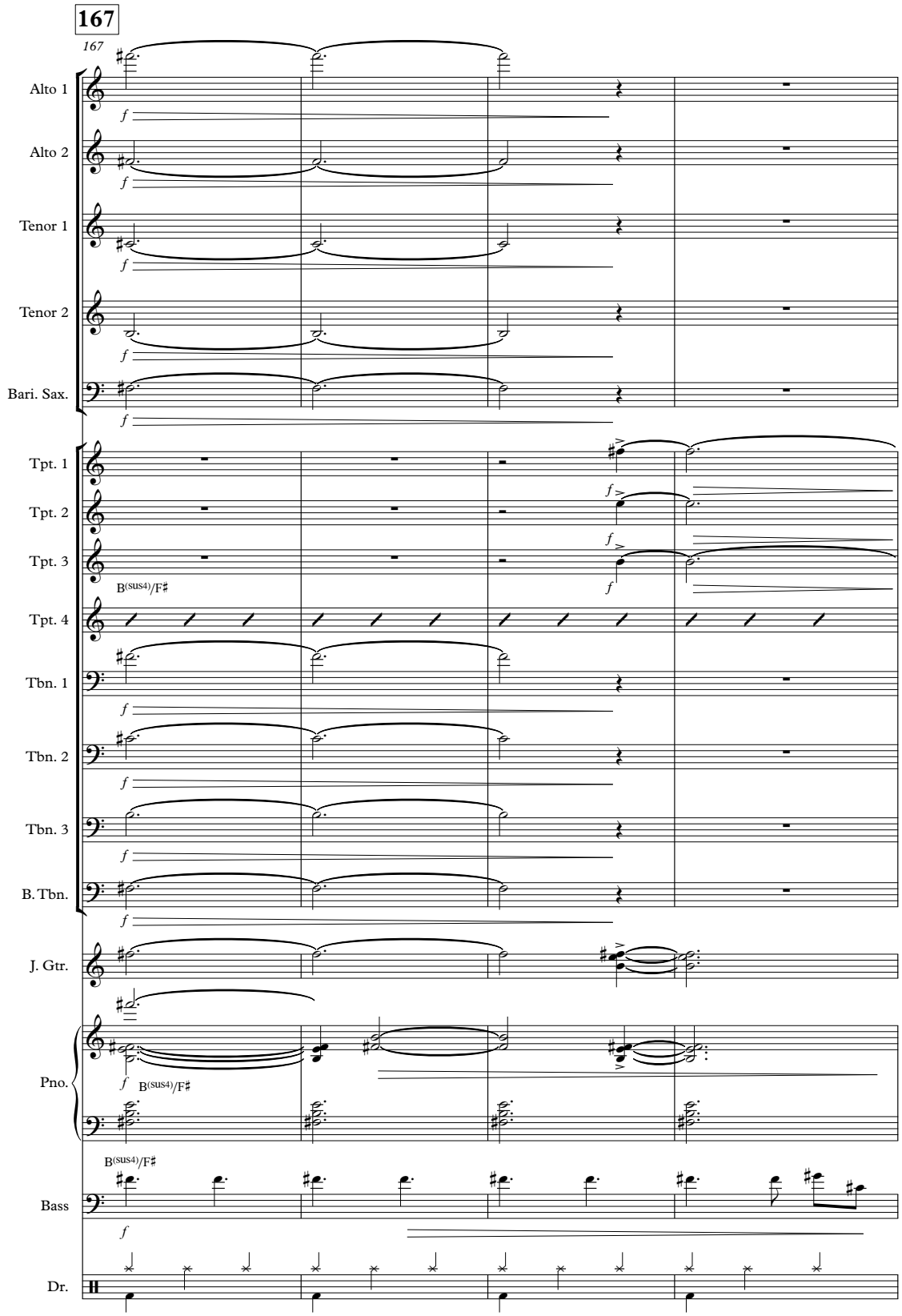

E-147
147
2.
Alto 1
mf
Alto 2
Tenor 1
mf
B♭m7
E♭m7
Gm7
Cm7
Tpt. 4
Tbn. 1
mp
Pno.
f
mf
B♭m7
E♭m7
Gm7
Cm7
Bass
B♭m7
E♭m7
Gm7
Cm7
f
mf
2.
Dr.

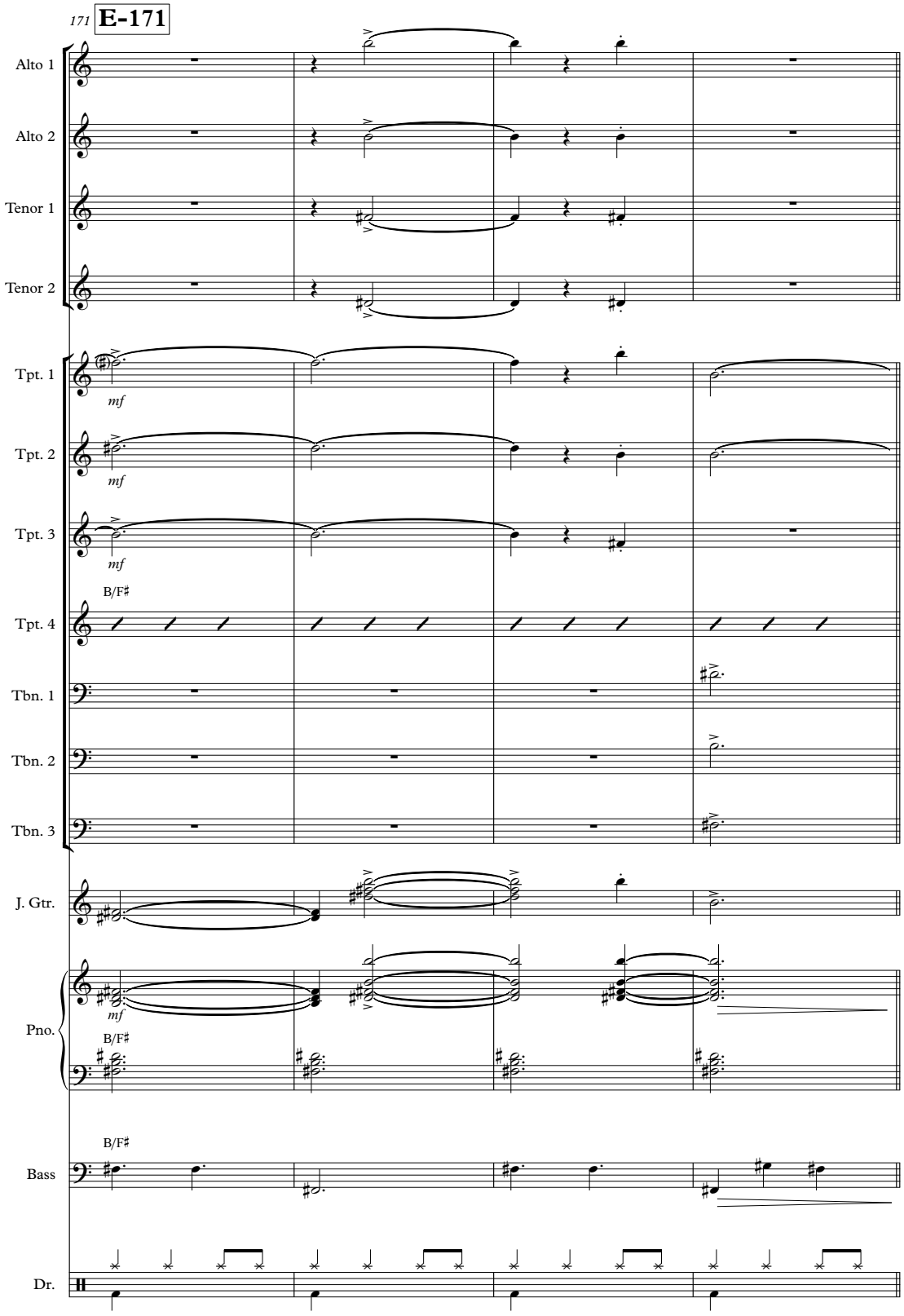

151
151
Alto 1
Tenor 1
Am11
Tpt. 4
Tbn. 1
Pno.
Am11
Am11
Bass
Dr.

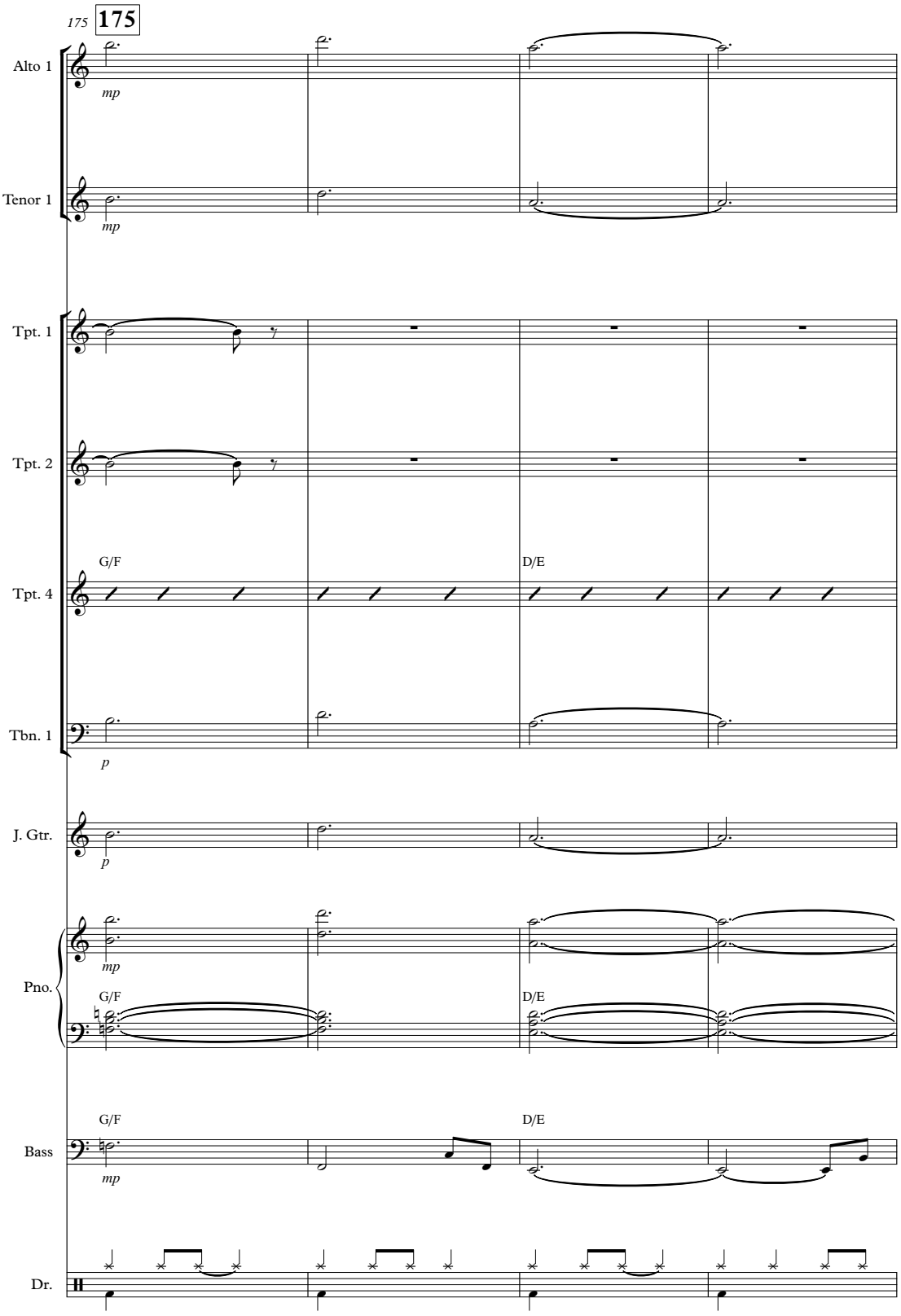

155
155
Alto 1
Tenor 1
Tpt. 4
Ab7(♯11)
Tbn. 1
Pno.
mp
Ab7(♯11)
Bass
Ab7(♯11)
mp
Dr.

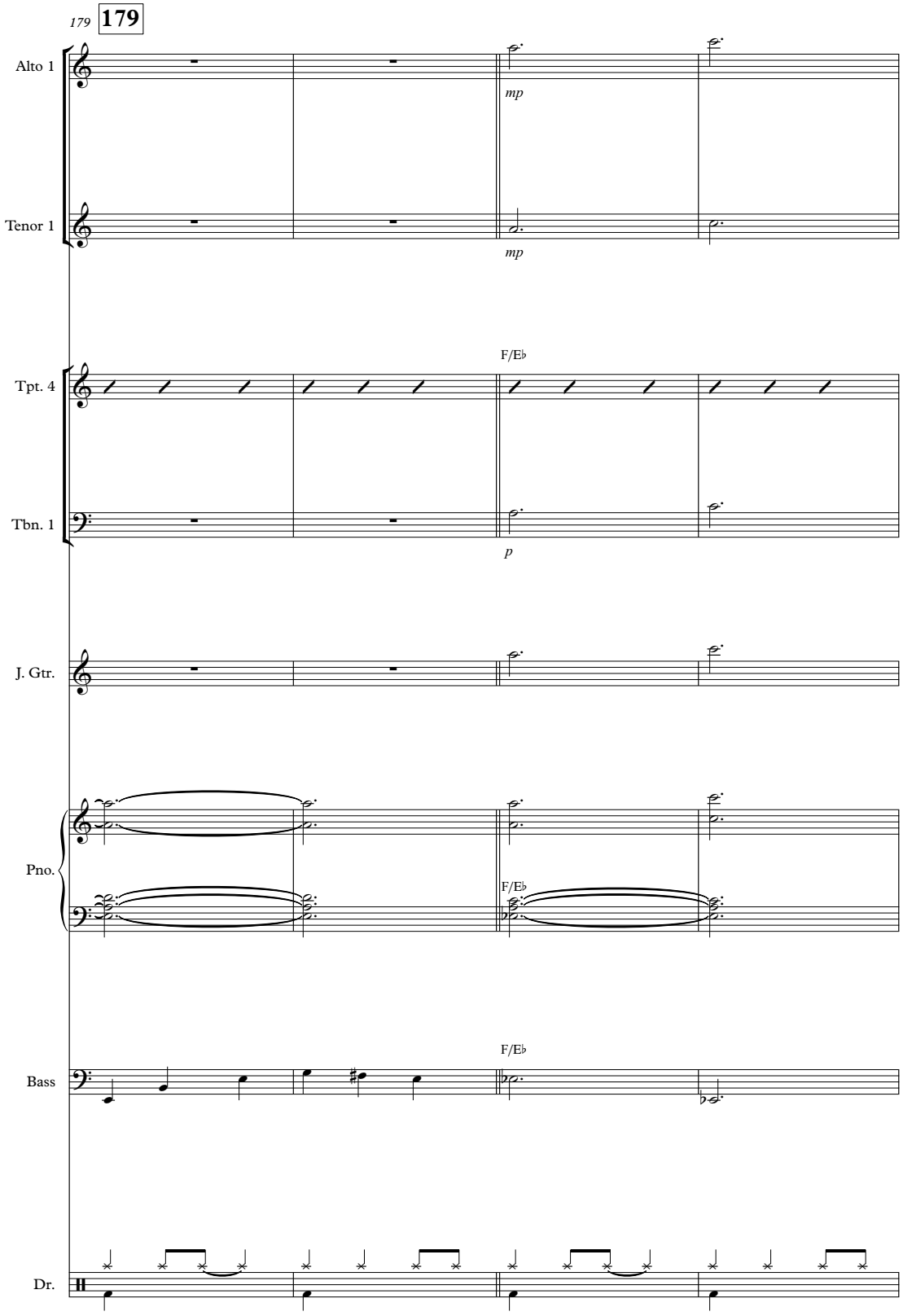

159
E-159
Alto 2
mp
Tenor 2
mp
Gmaj7(♯11)
Tpt. 4
Tbn. 1
Tbn. 3
J. Gtr.
Pno.
p
Gmaj7(♯11)
Gmaj7(♯11)
Bass
p
Dr.
p

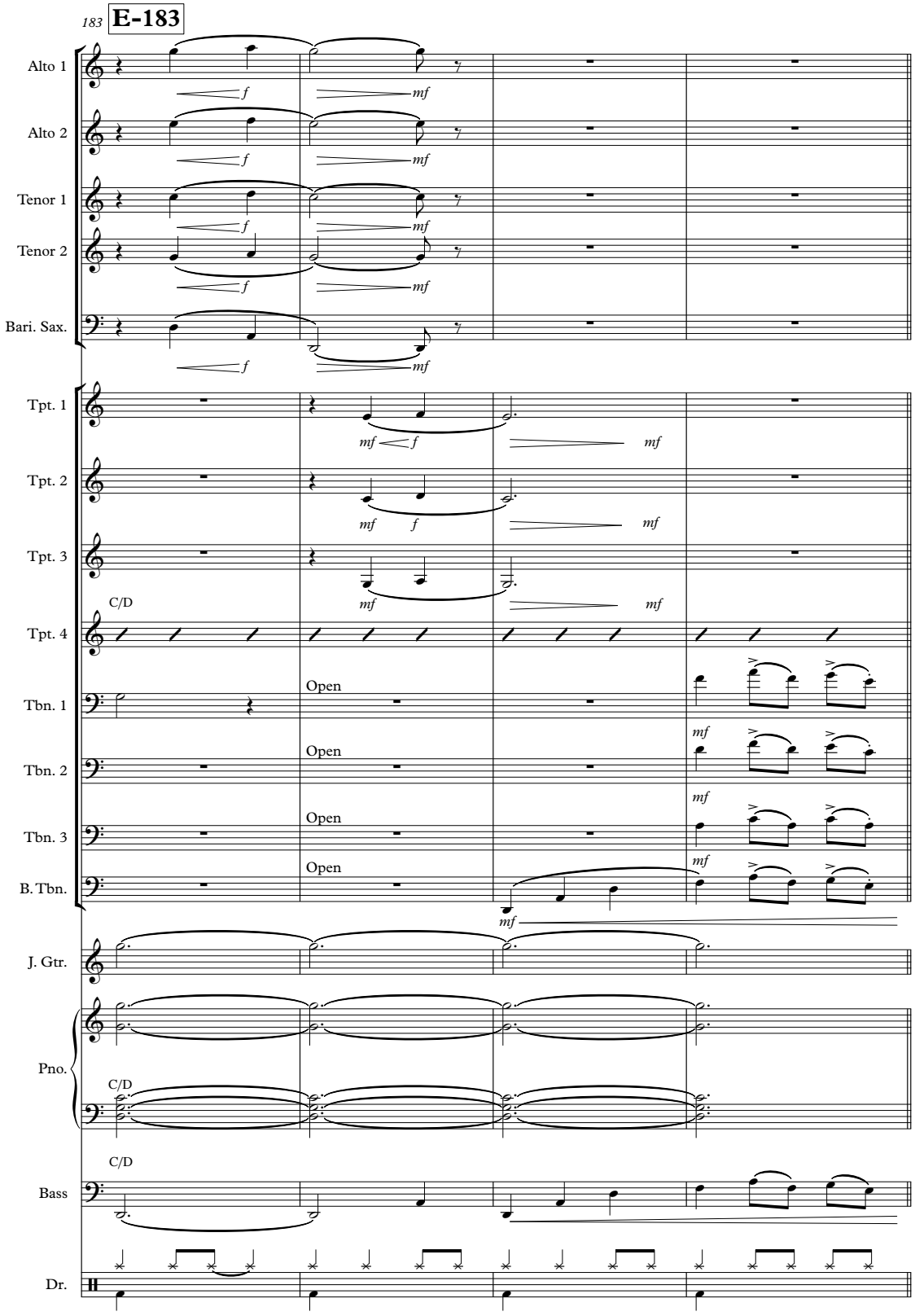

163
163
Alto 1
mf
Alto 2
mf
Tenor 1
mf
Tenor 2
mf
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
Bucket
J. Gtr.
Pno.
Bass
f
Dr.
p

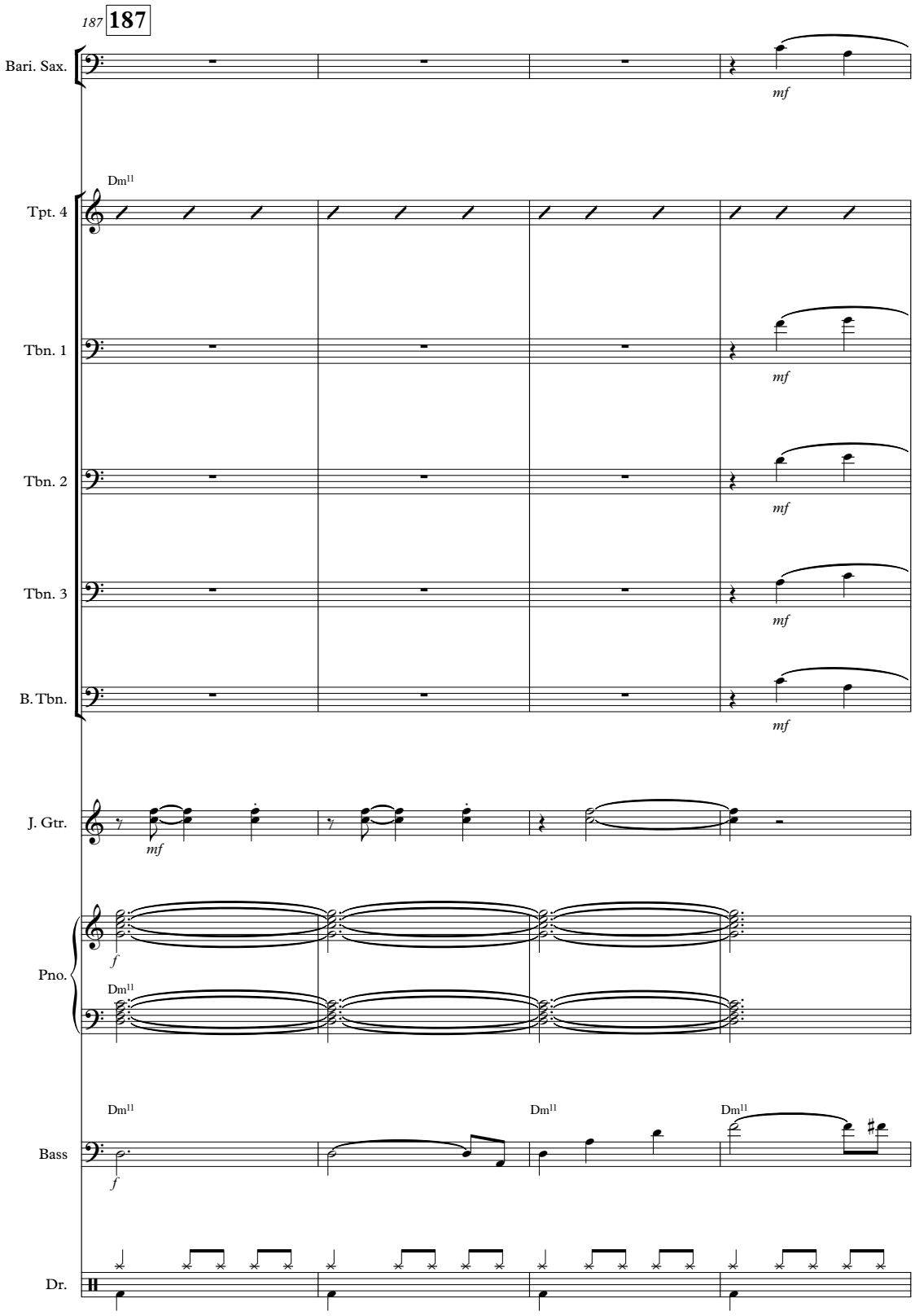

167
167
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
f
B(sus4)/F♯

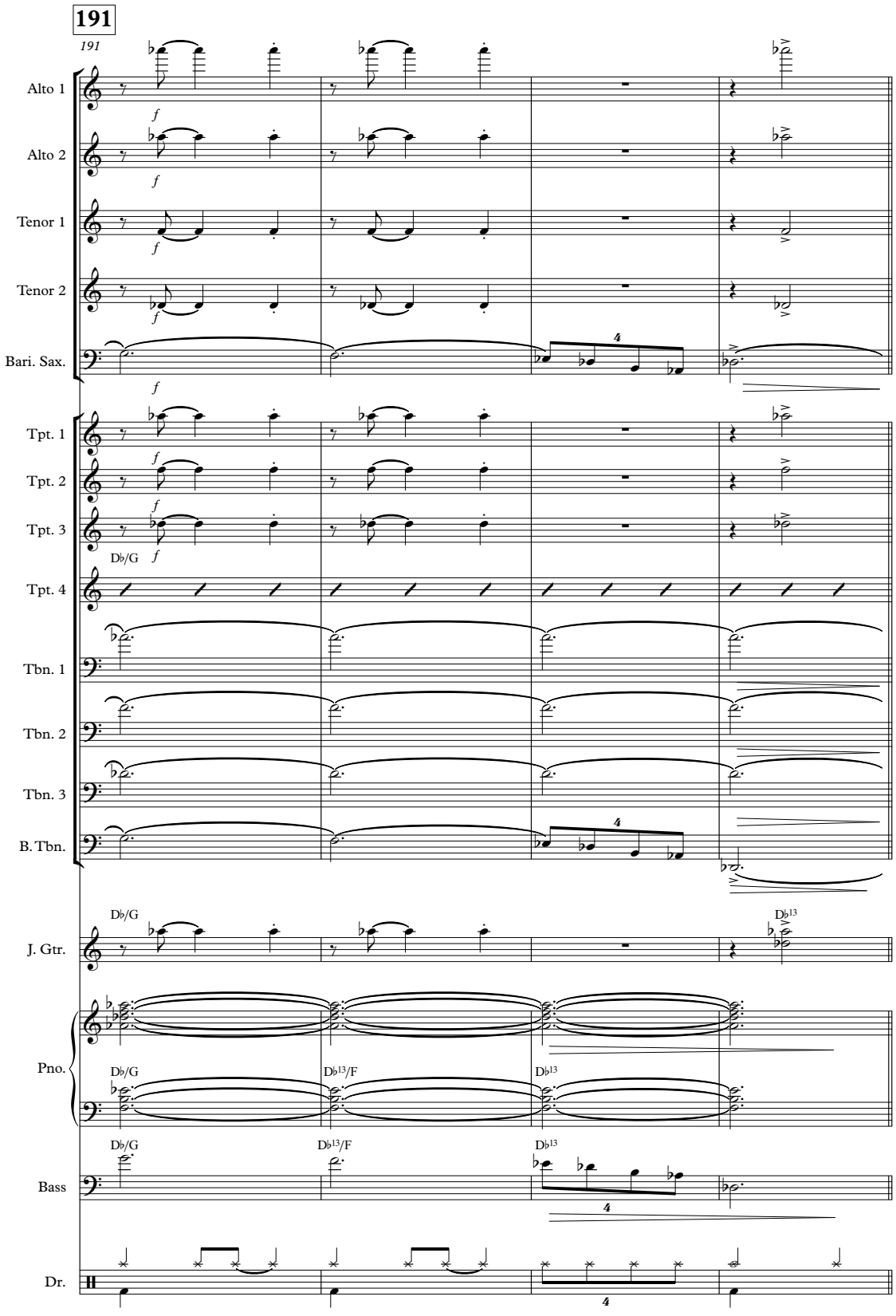

171
E-171
Alto 1
Alto 2
Tenor 1
Tenor 2
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
J. Gtr.
Pno.
Bass
Dr.
mf
B/F♯

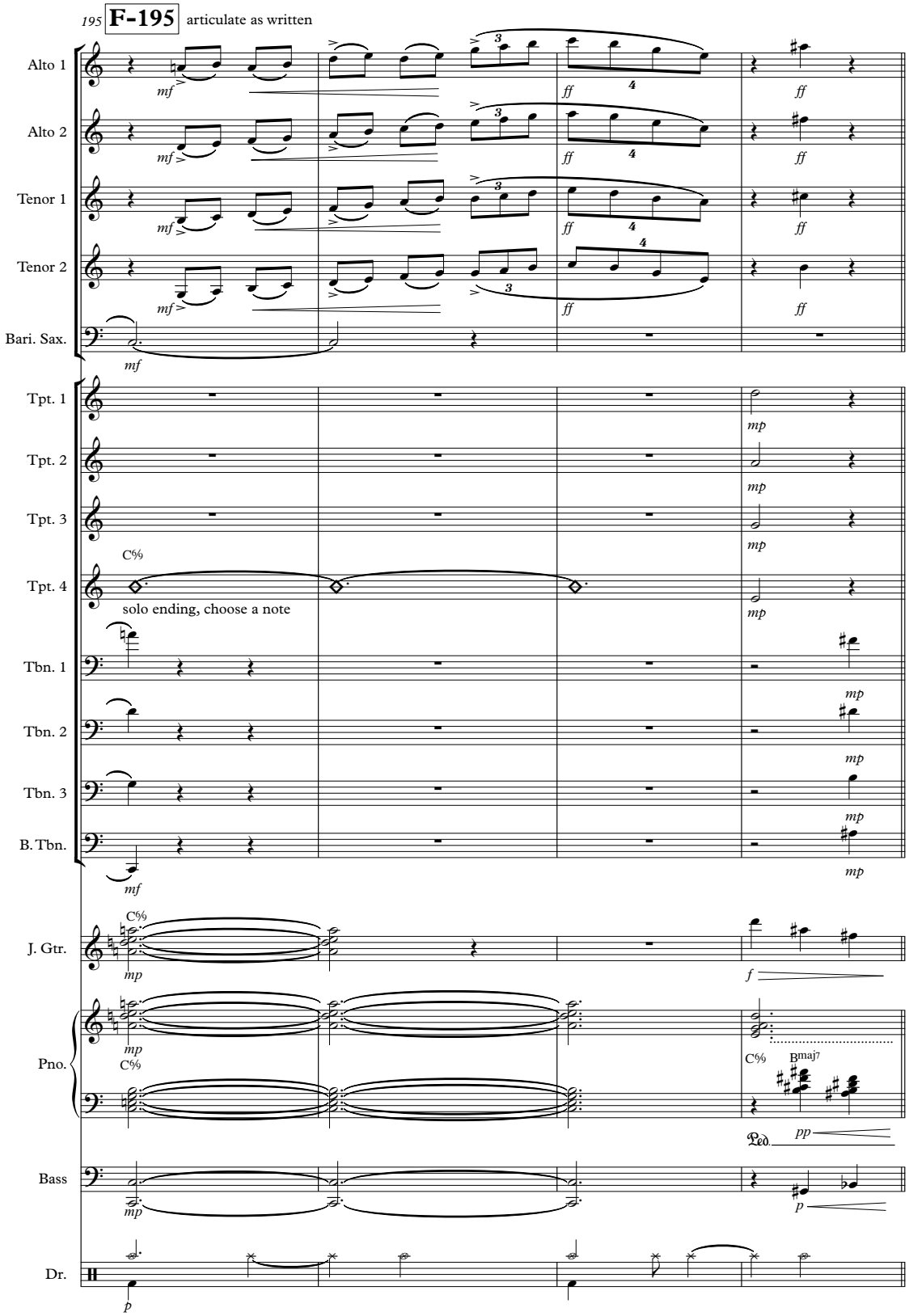

175
175
Alto 1
mp
Tenor 1
mp
Tpt. 1
Tpt. 2
Tpt. 4
G/F
D/E
Tbn. 1
p
J. Gtr.
p
Pno.
mp
G/F
D/E
Bass
G/F
D/E
mp
Dr.

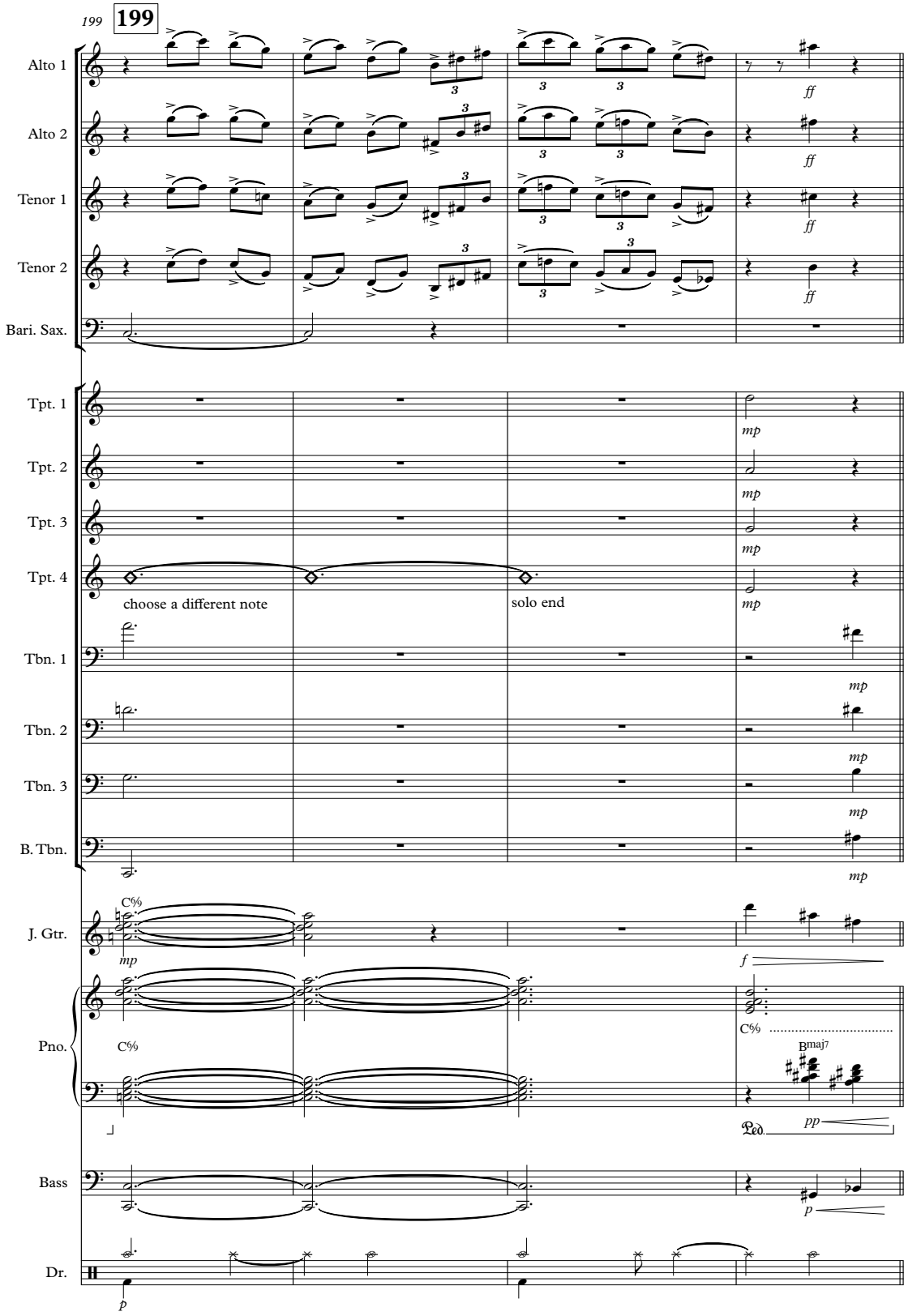

179
179
Alto 1
mp
Tenor 1
mp
F/E♭
Tpt. 4
Tbn. 1
p
J. Gtr.
Pno.
F/E♭
F/E♭
Bass
Dr.

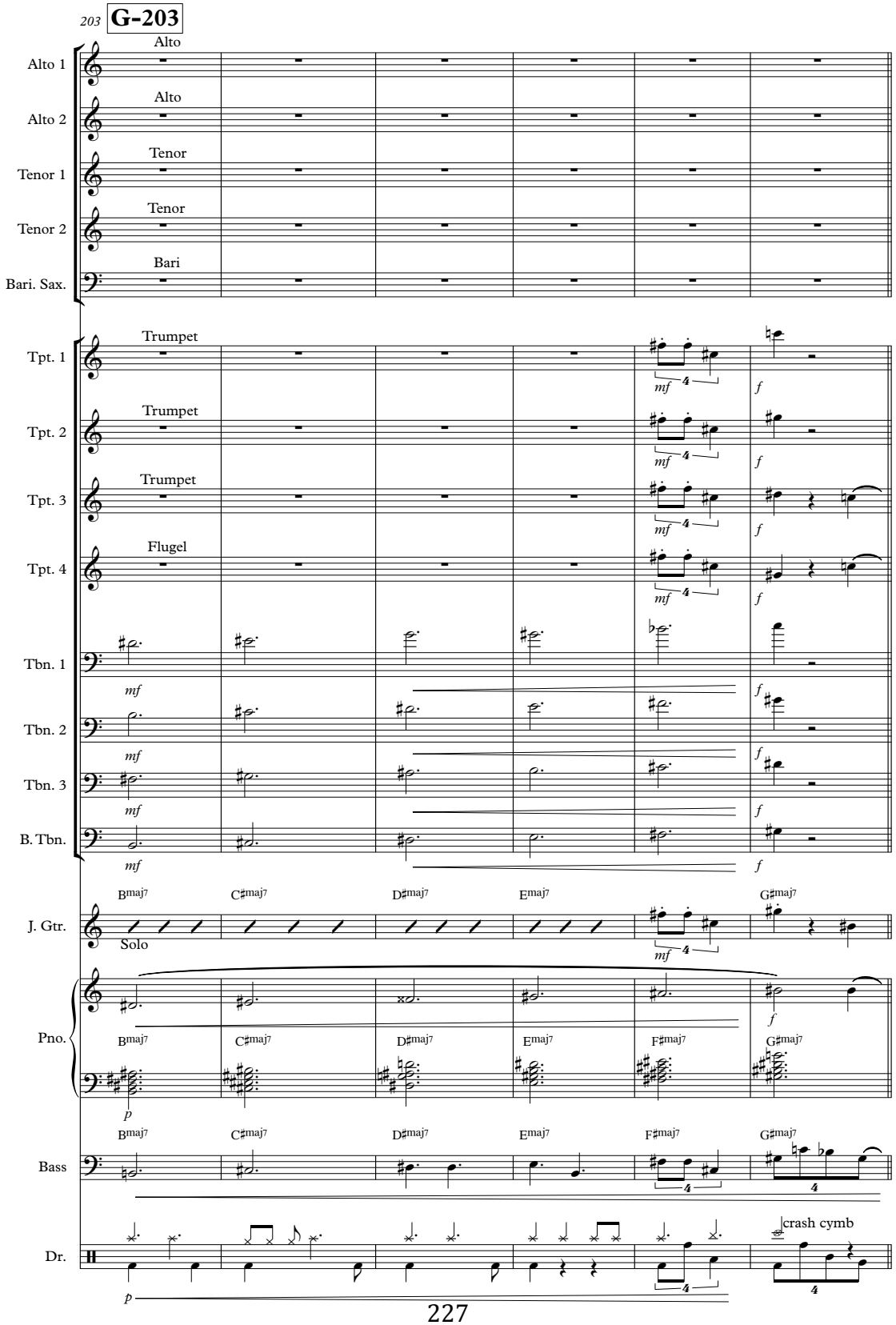

183
E-183
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
C/D
Open
f
mf

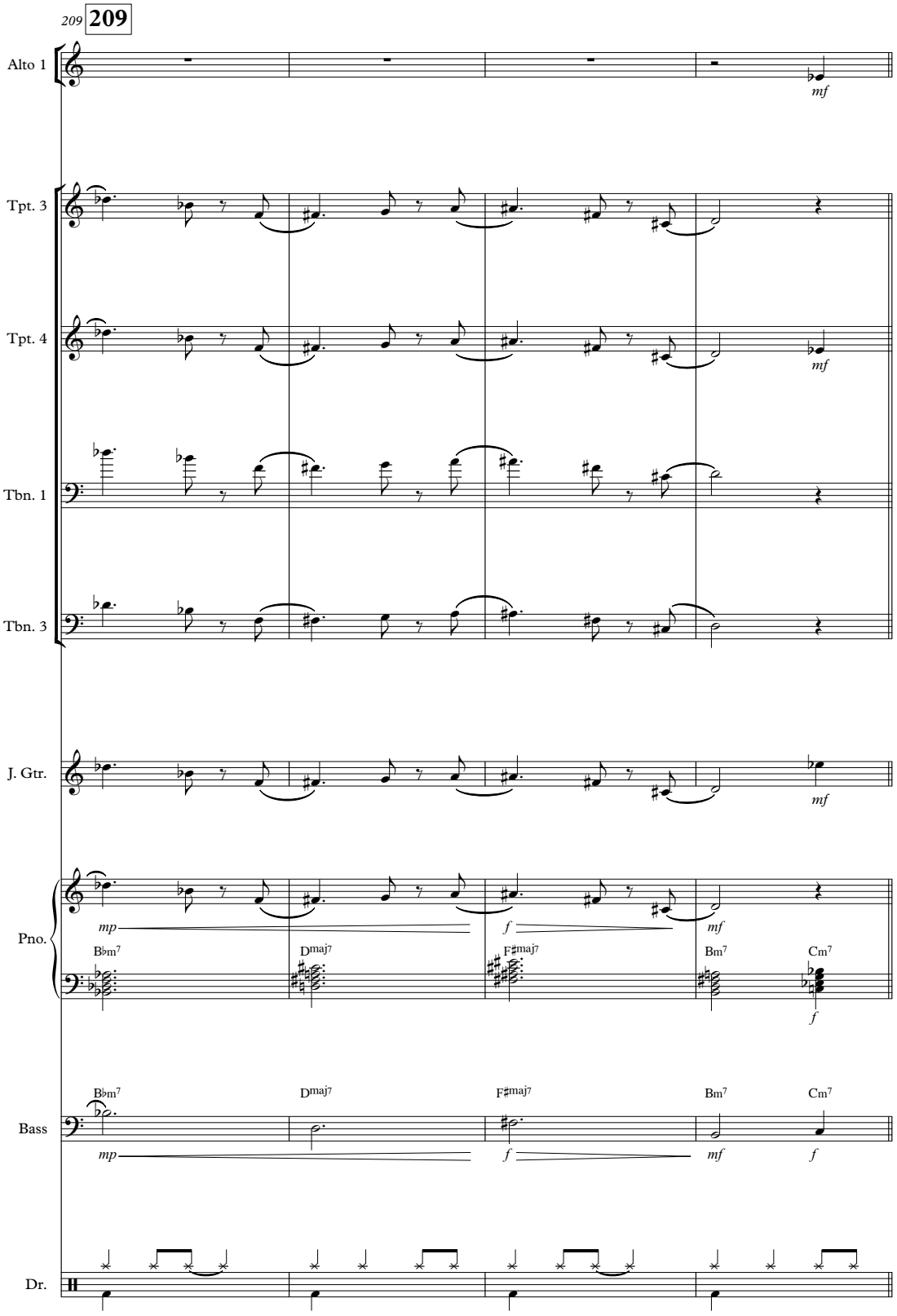

187
187
Bari. Sax.
mf
Dm11
Tpt. 4
Tbn. 1
mf
Tbn. 2
mf
Tbn. 3
mf
B. Tbn.
mf
J. Gtr.
mf
f
Pno.
Dm11
Dm11
Dm11
Dm11
Bass
f
Dr.

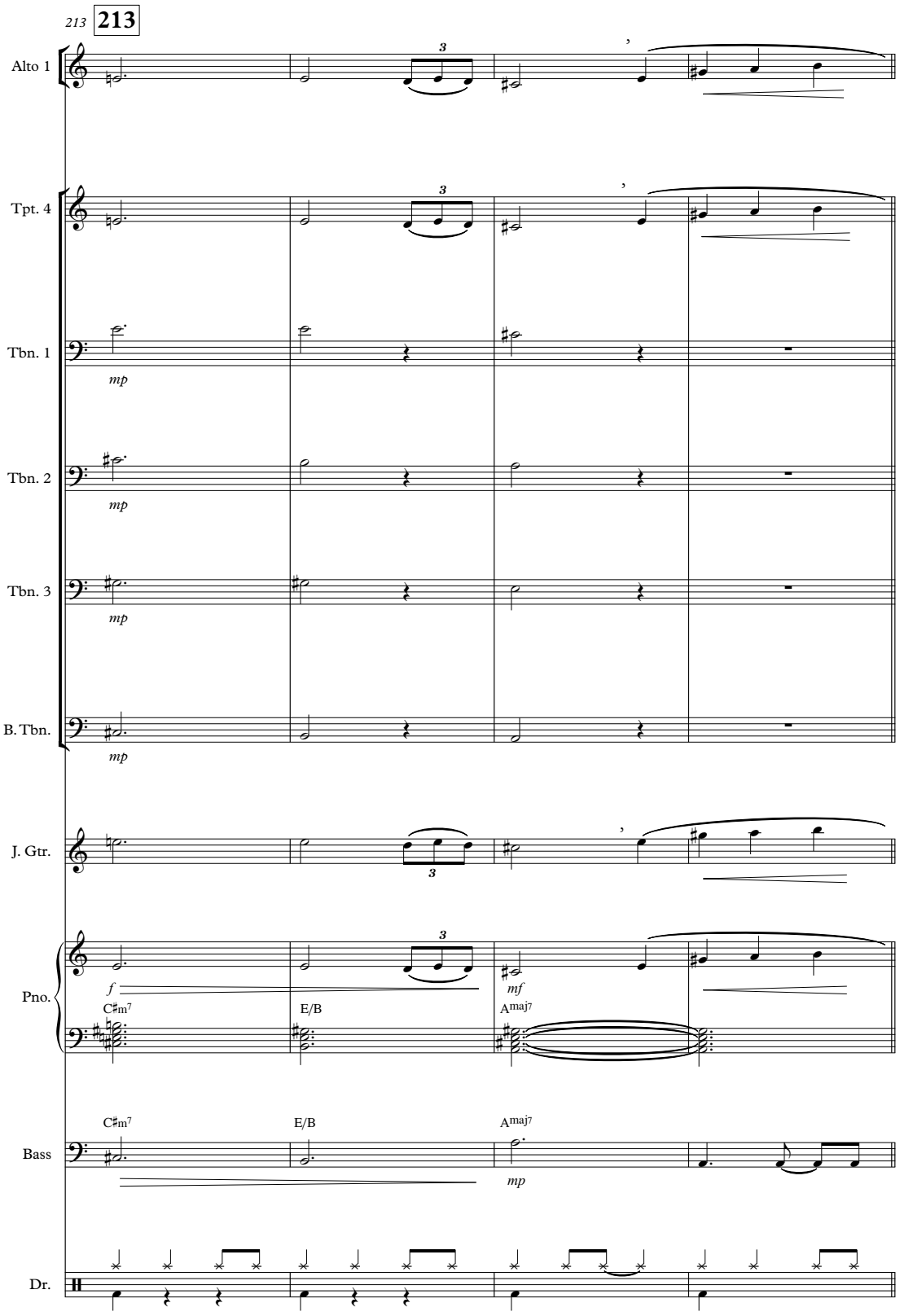

191
191
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
f
D♭/G
D♭13
D♭13/F
4

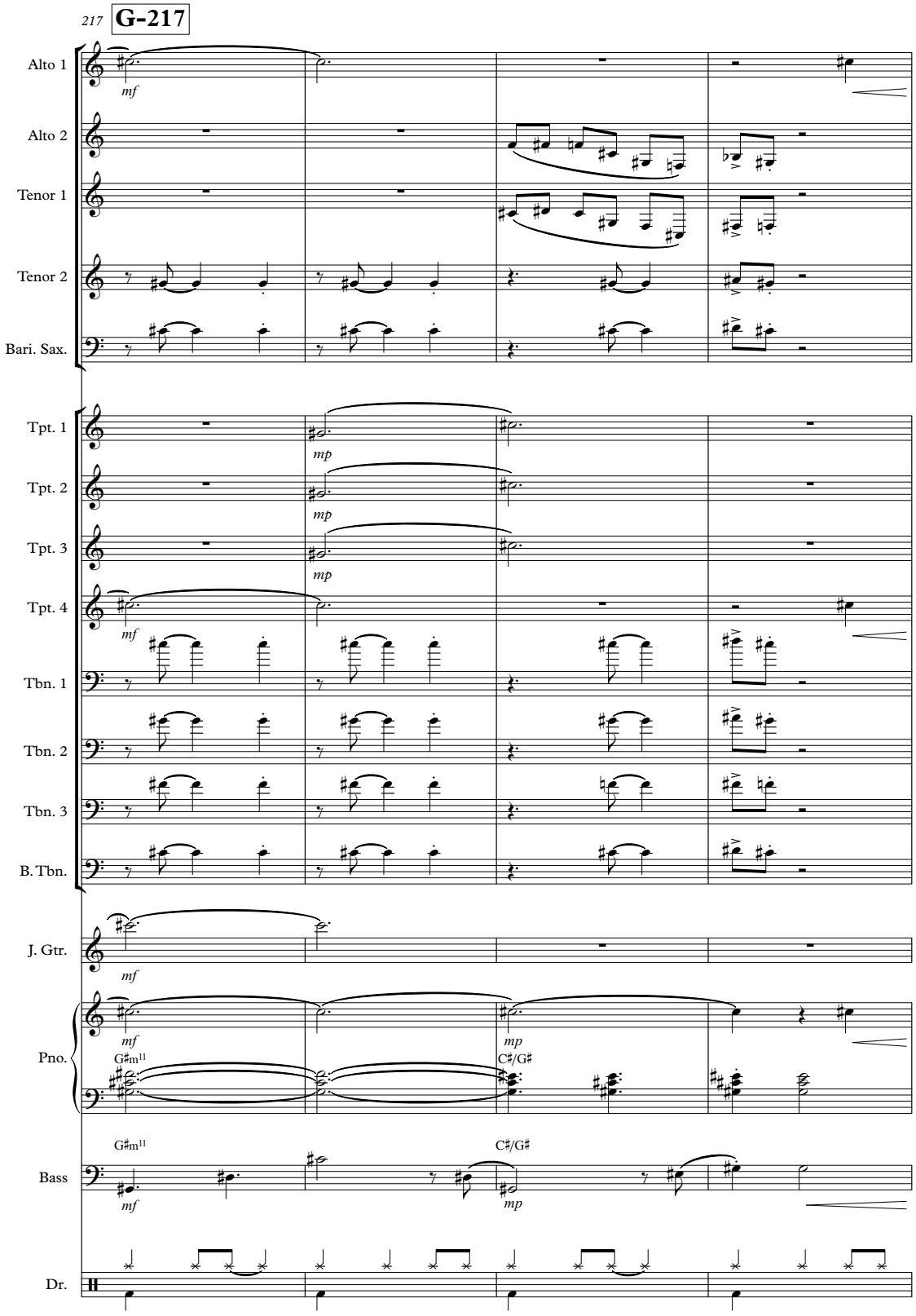

195
F-195
articulate as written
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
C%
solo ending, choose a note
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
C%
Bmaj7
Bass
Dr.

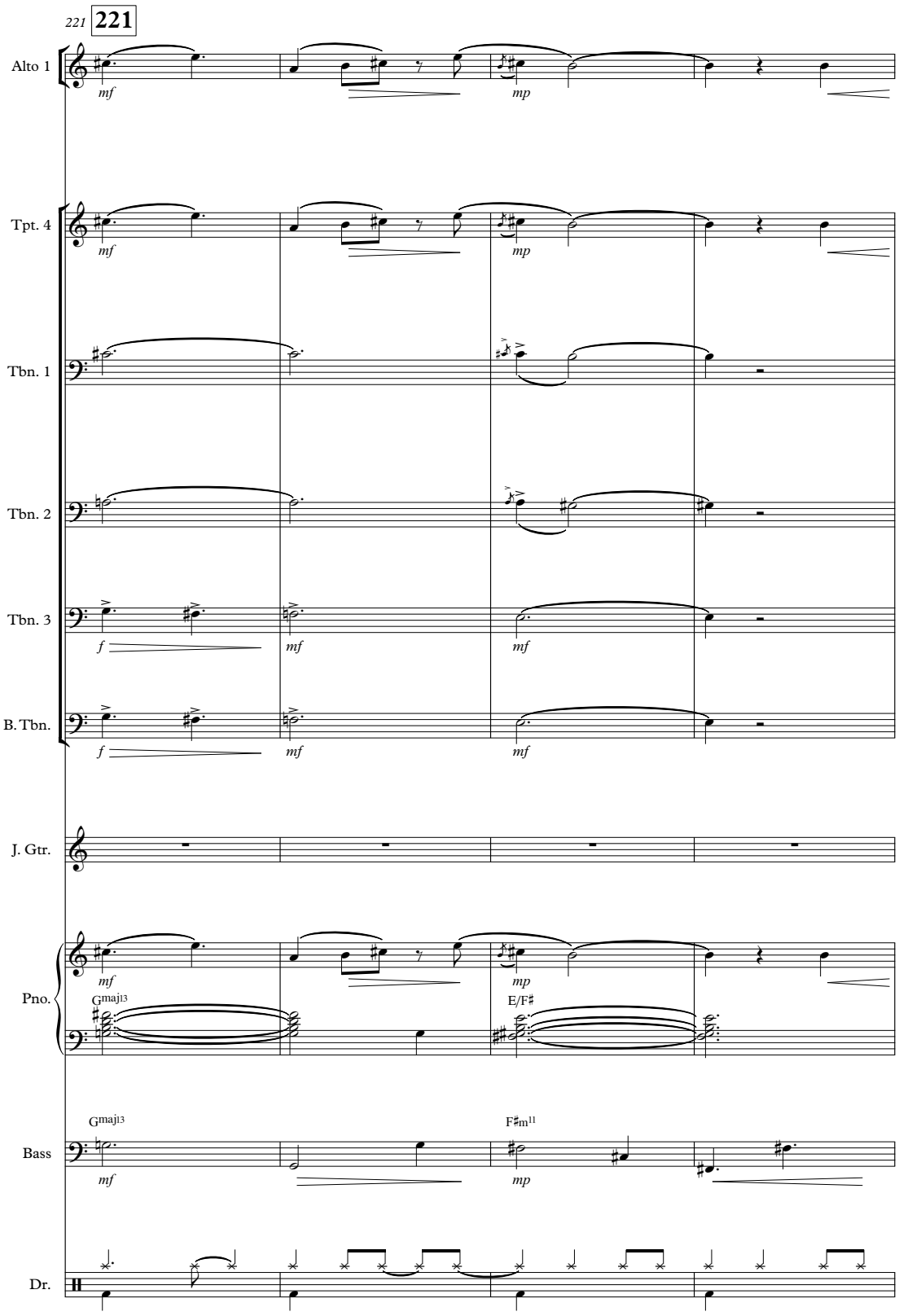

199
199
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
choose a different note
solo end
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
ff
mp
f
pp
p
Bmaj7
Ped.

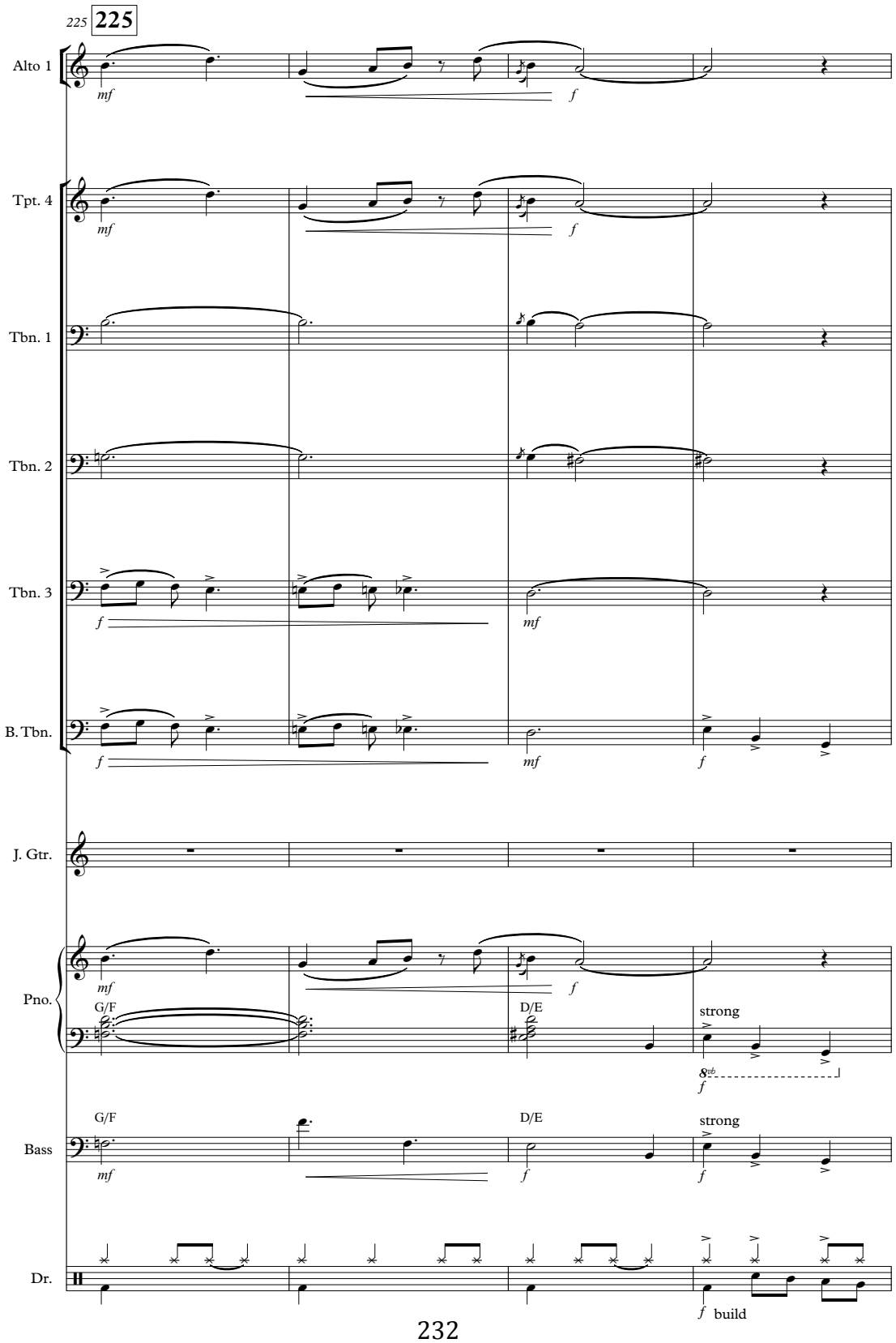

203
G-203
Alto
Alto 1
Alto
Alto 2
Tenor
Tenor 1
Tenor
Tenor 2
Bari
Bari. Sax.
Trumpet
Tpt. 1
Trumpet
Tpt. 2
Trumpet
Tpt. 3
Flugel
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Solo
Pno.
Bass
Dr.
crash cymb
mf
f
p
Bmaj7
C♯maj7
D♯maj7
Emaj7
F♯maj7
G♯maj7

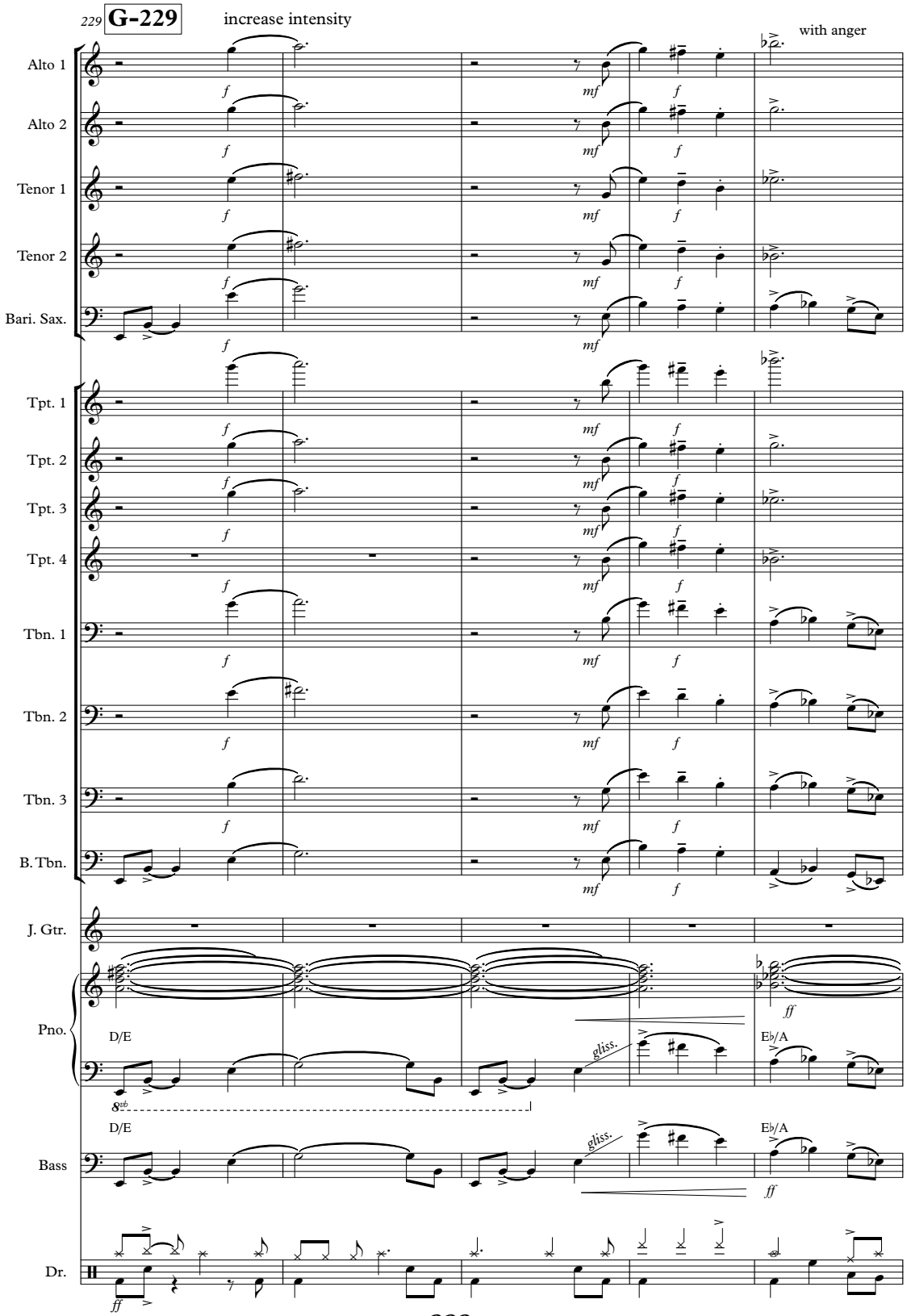

209
209
Alto 1
mf
Tpt. 3
Tpt. 4
mf
Tbn. 1
Tbn. 3
J. Gtr.
mf
Pno.
mp
f
mf
B♭m7
Dmaj7
F♯maj7
Bm7
Cm7
f
Bass
B♭m7
Dmaj7
F♯maj7
Bm7
Cm7
mp
f
mf
f
Dr.

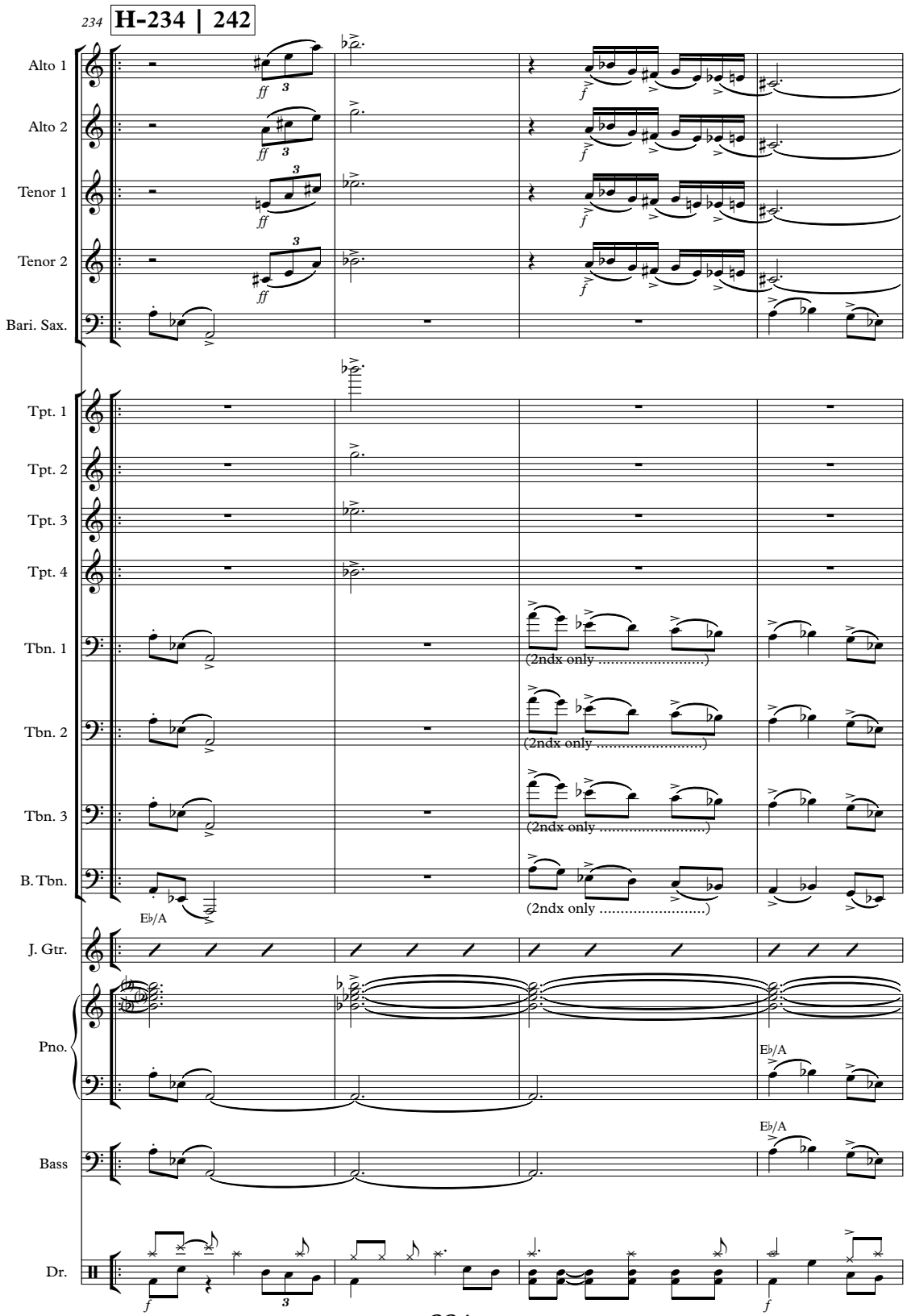

213
213
Alto 1
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mp
f
mf
C♯m7
E/B
Amaj7

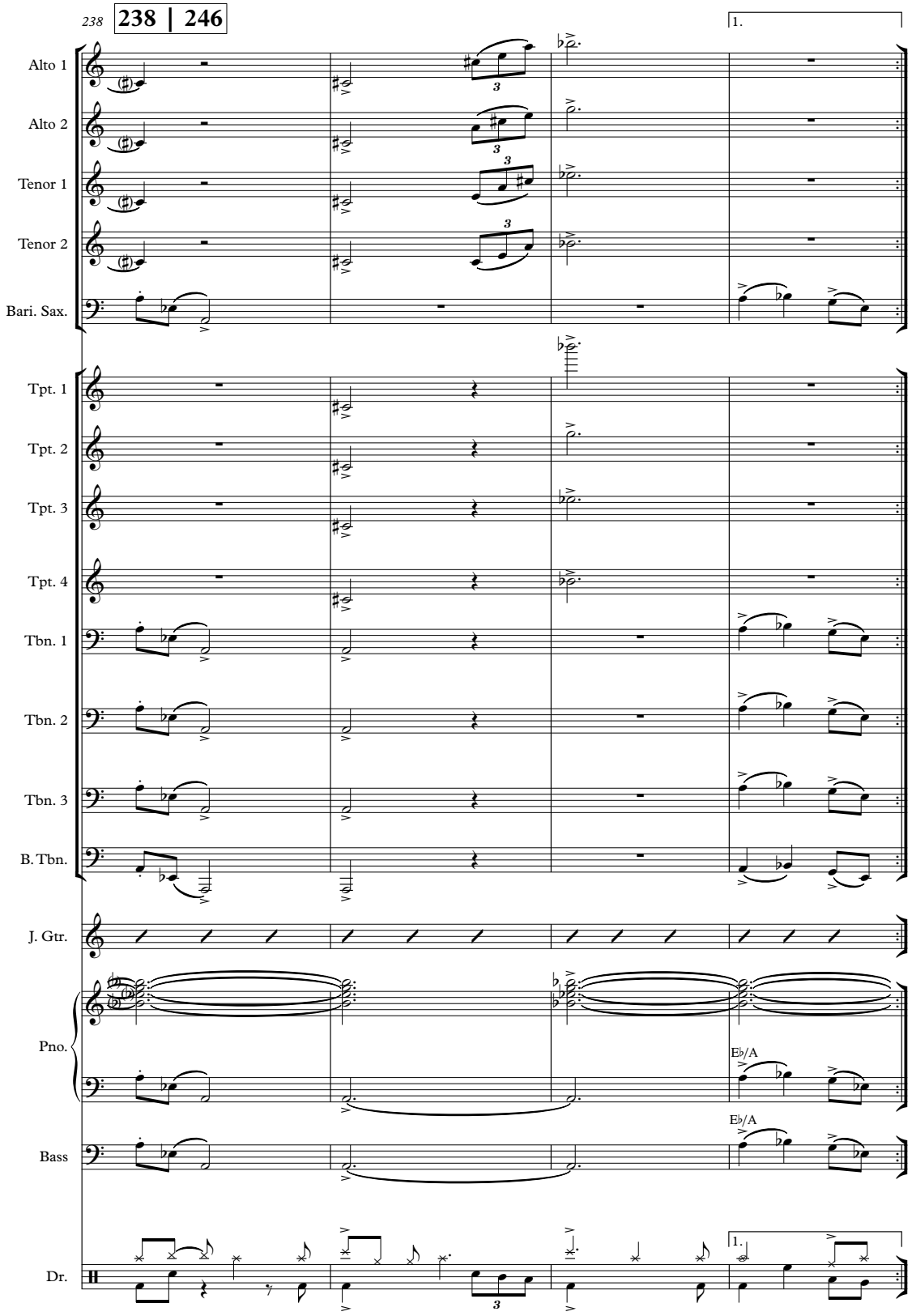

217
G-217
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
mp
G♯m11
C♯/G♯

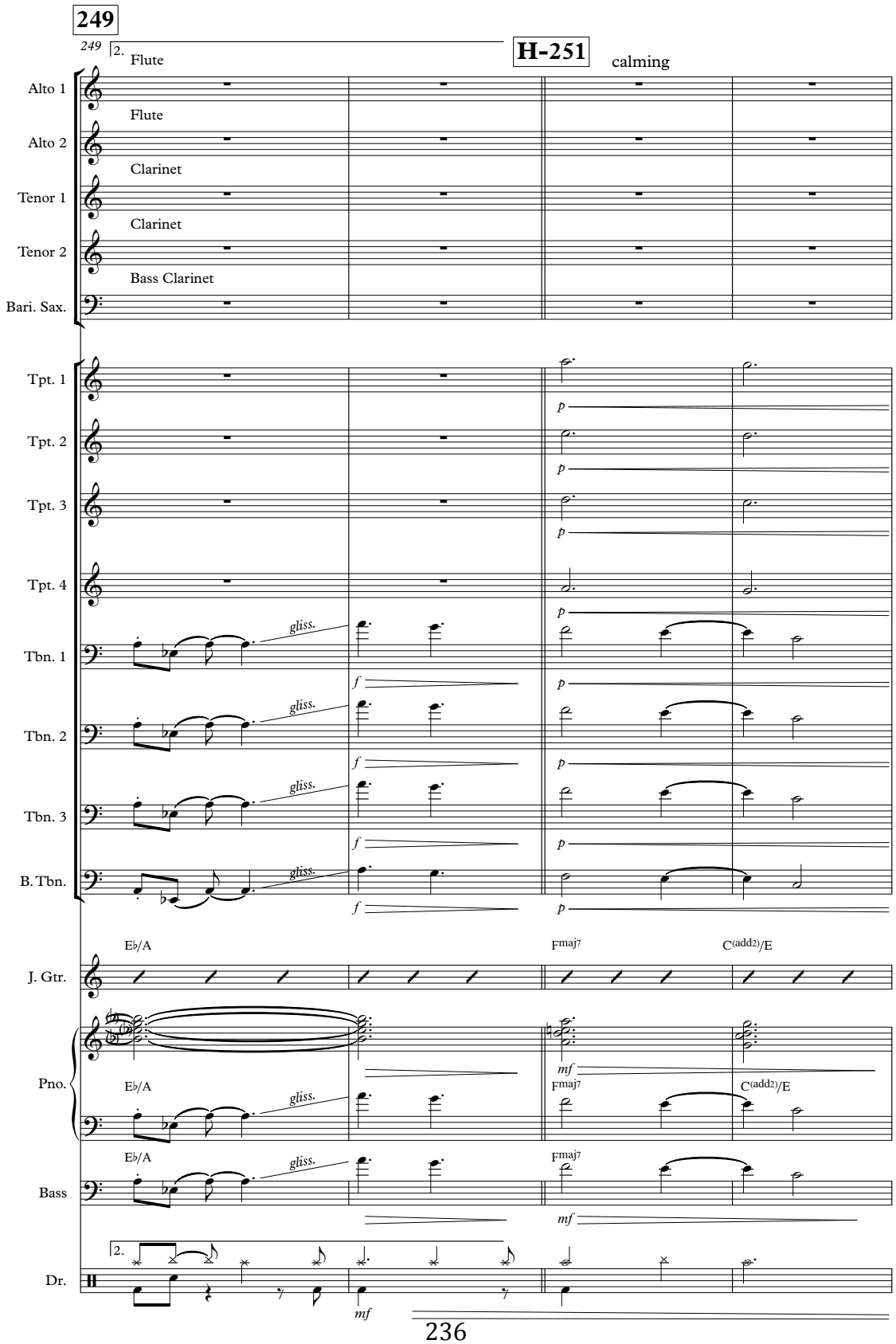

221
221
Alto 1
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
mp
f
Gmaj13
E/F♯
Gmaj13
F♯m11

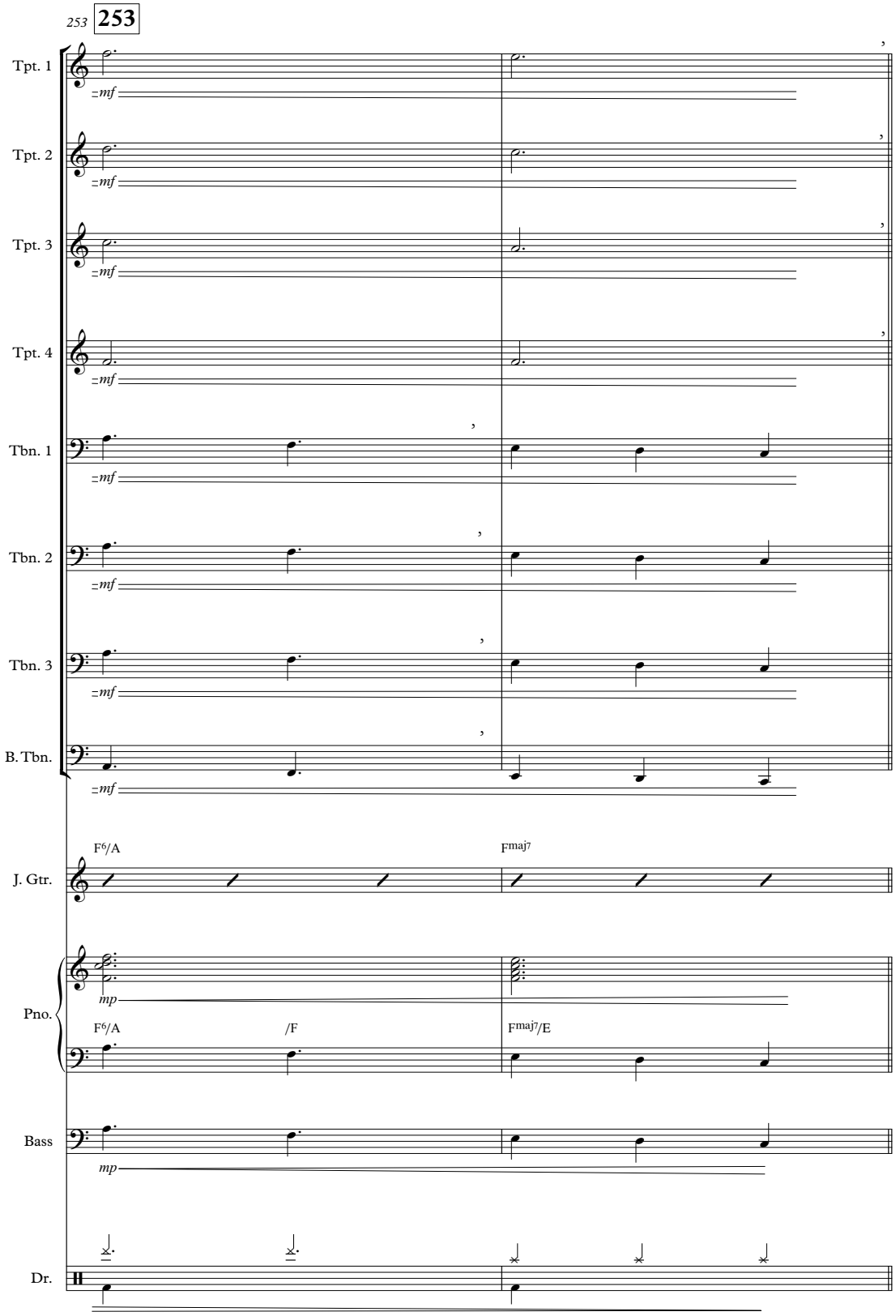

225
225
Alto 1
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
mf
f
G/F
D/E
strong
8vb
build

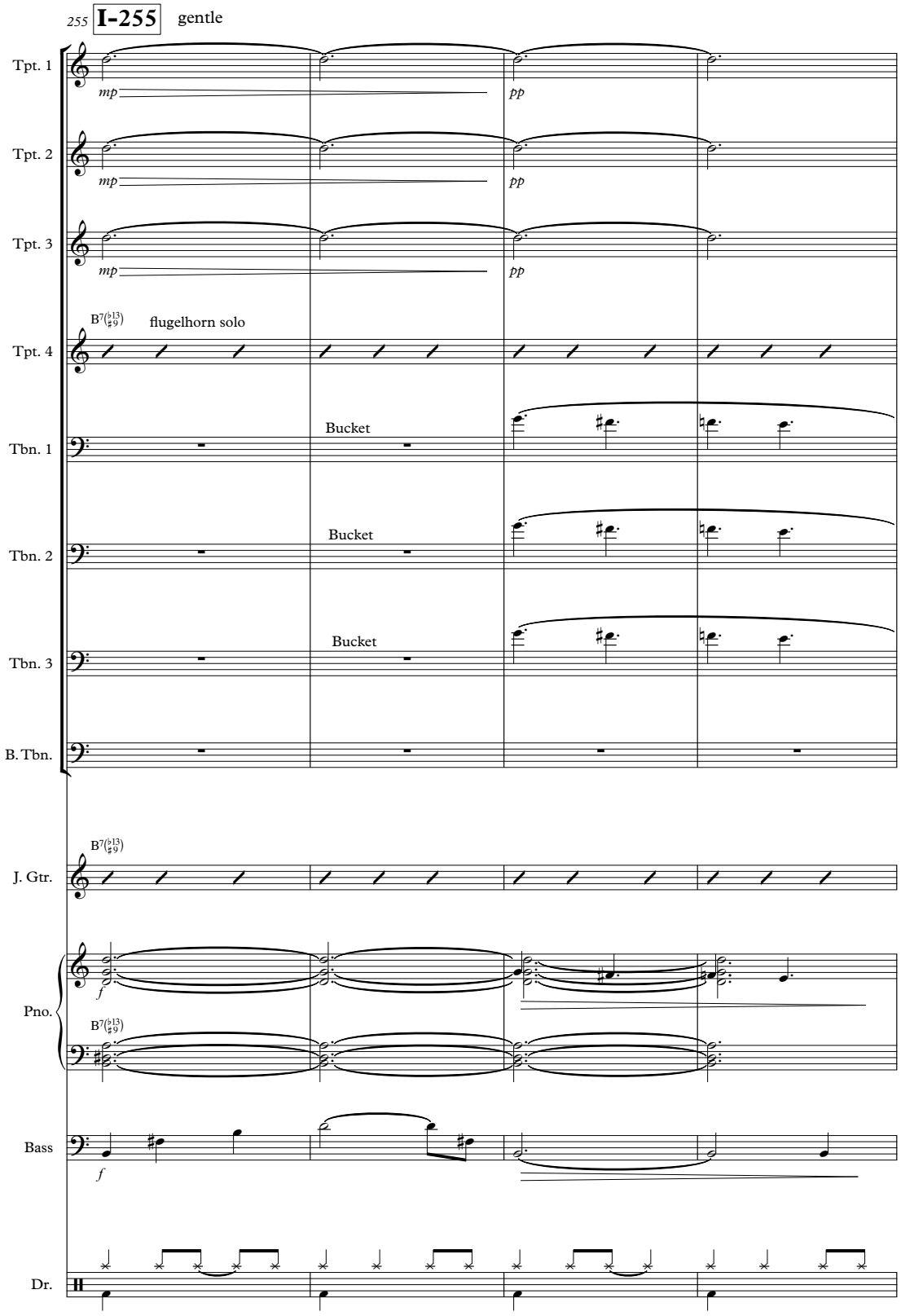

229
G-229
increase intensity
with anger
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
D/E
E♭/A
gliss.
8vb
Bass
Dr.
f
mf
ff

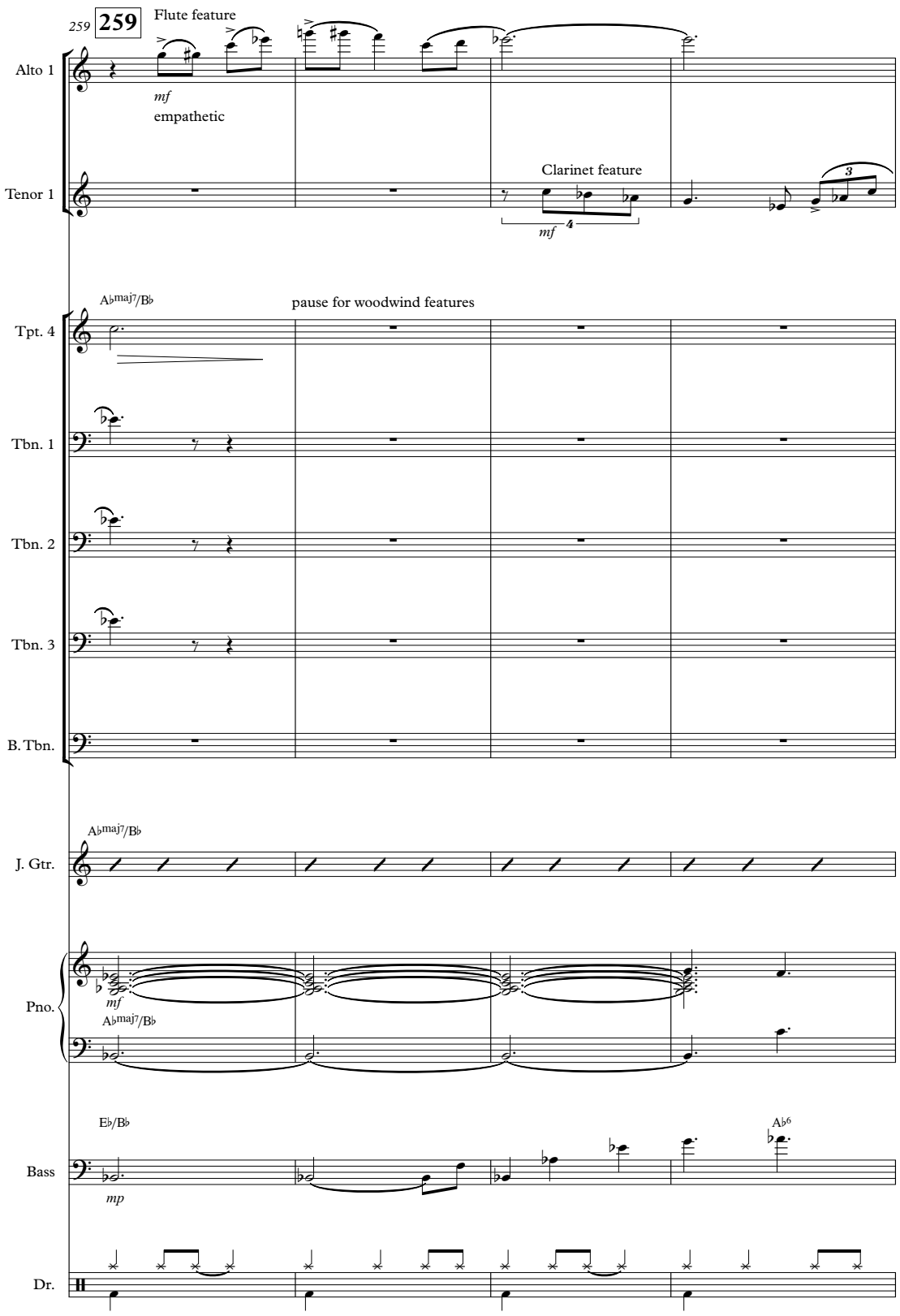

234
H-234 | 242
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
(2ndx only .....)
E♭/A
J. Gtr.
Pno.
Bass
Dr.

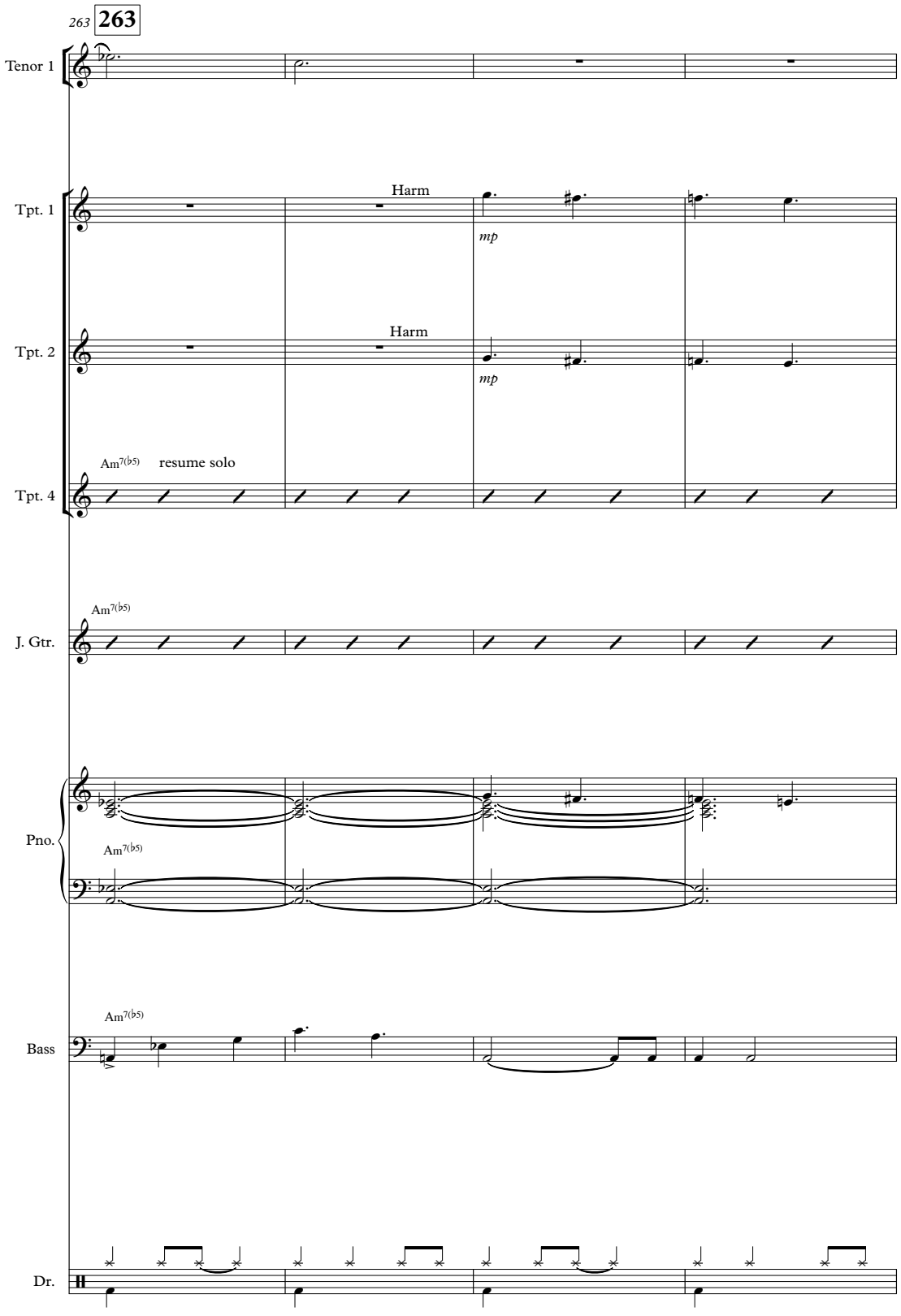

238
238 | 246
1.
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.
E♭/A
E♭/A
1.

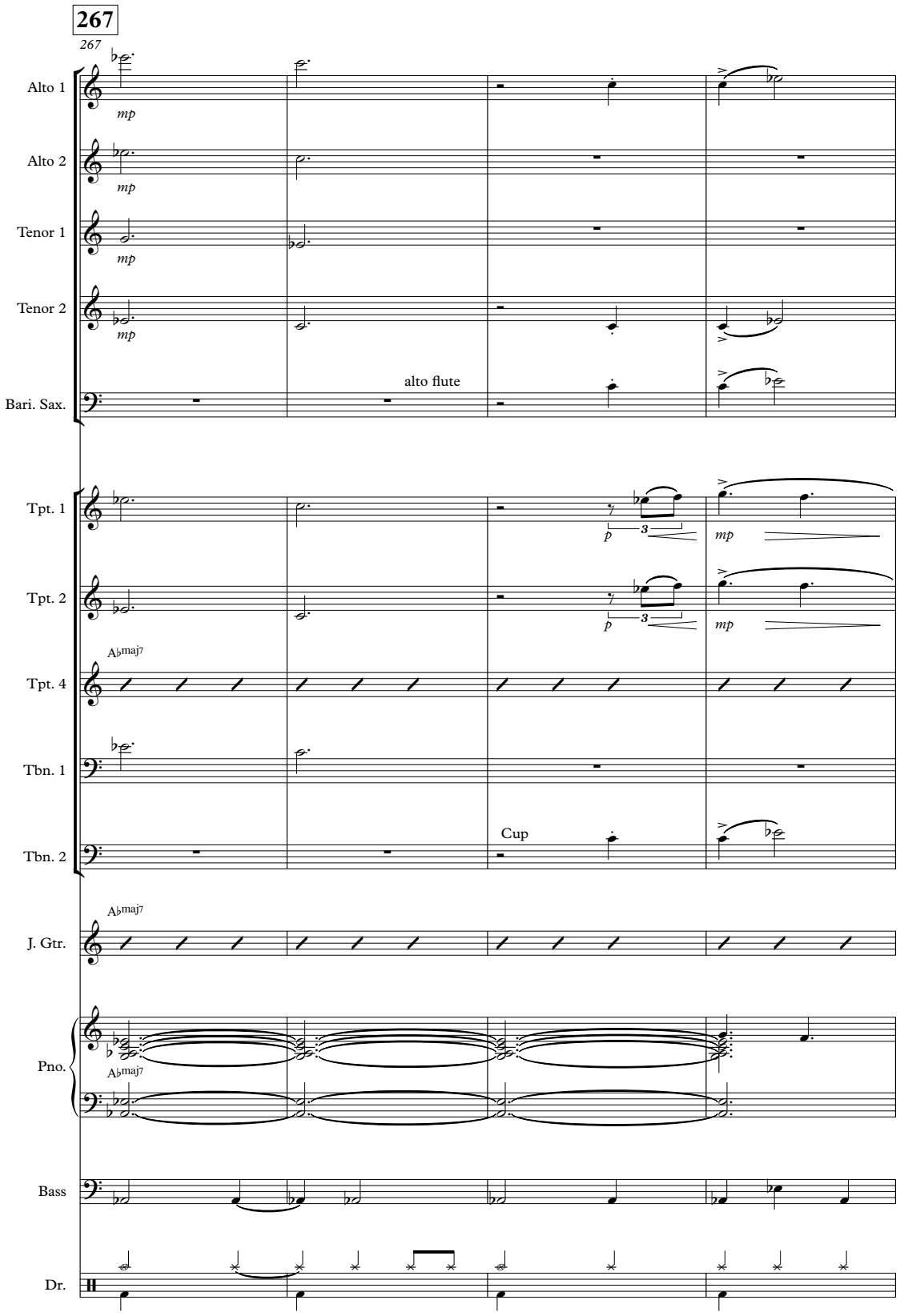

249
249
2.
Flute
H-251
calming
Alto 1
Flute
Alto 2
Clarinet
Tenor 1
Clarinet
Tenor 2
Bass Clarinet
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
gliss.
J. Gtr.
E♭/A
Fmaj7
C(add2)/E
Pno.
Bass
Dr.
2.
mf

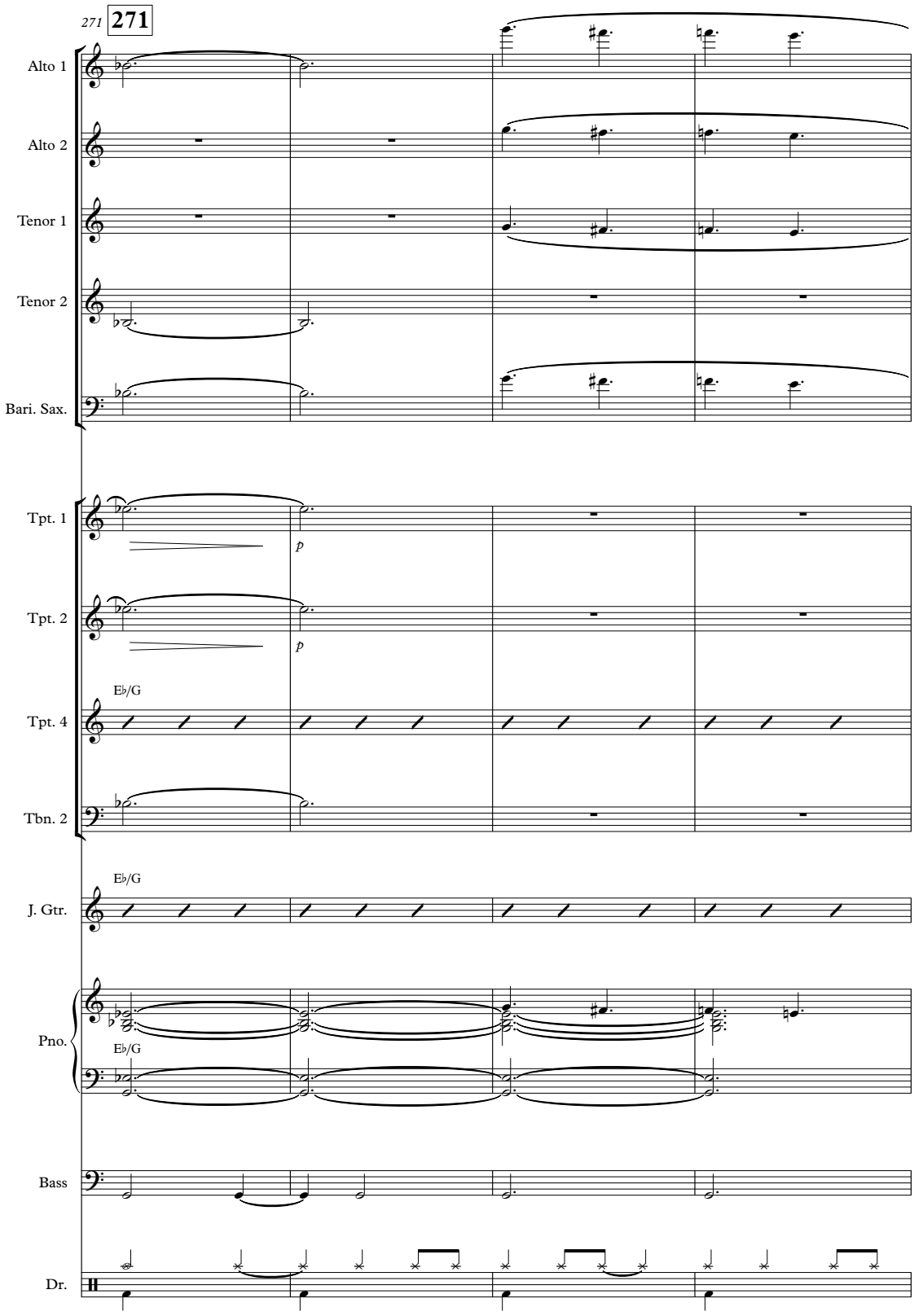

253
253
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
mf
J. Gtr.
F6/A
Fmaj7
Pno.
mp
F6/A
/F
Fmaj7/E
Bass
mp
Dr.

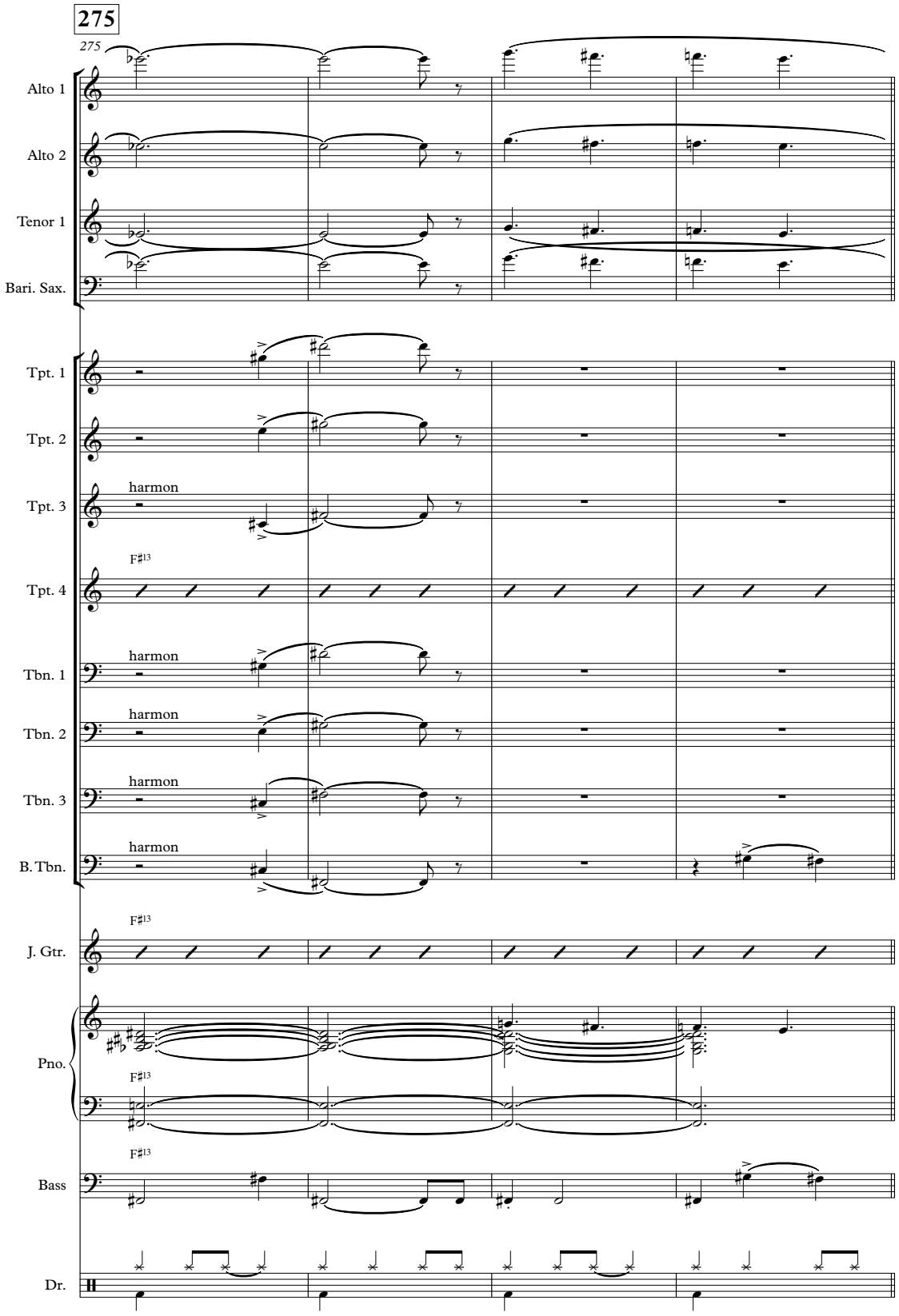

255
I-255
gentle
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
flugelhorn solo
Tbn. 1
Bucket
Tbn. 2
Bucket
Tbn. 3
Bucket
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.

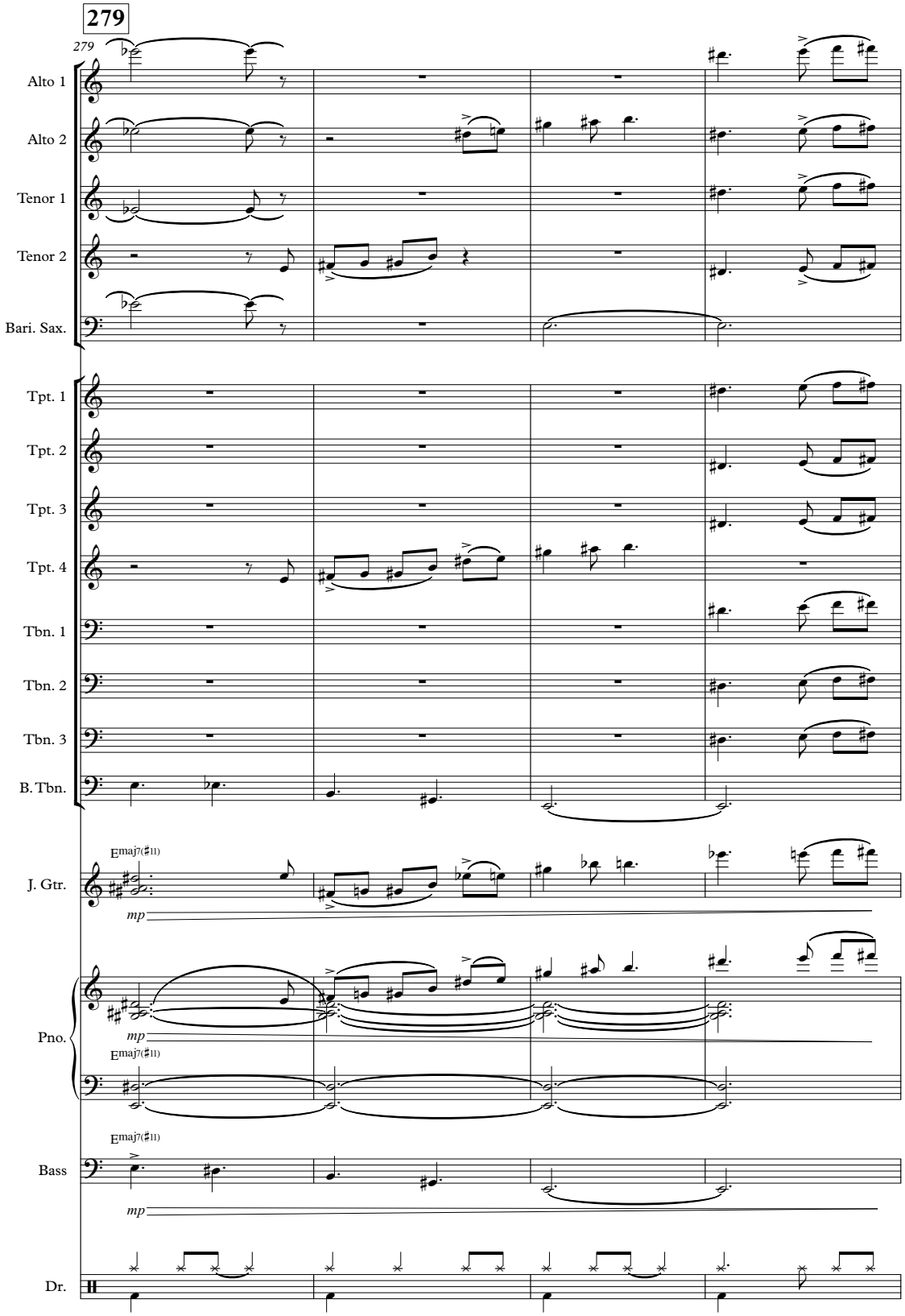

259
259
Flute feature
Alto 1
mf
empathetic
Tenor 1
Clarinet feature
mf
4
3
A♭maj7/B♭
pause for woodwind features
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
A♭maj7/B♭
J. Gtr.
mf
A♭maj7/B♭
Pno.
E♭/B♭
A♭6
Bass
mp
Dr.

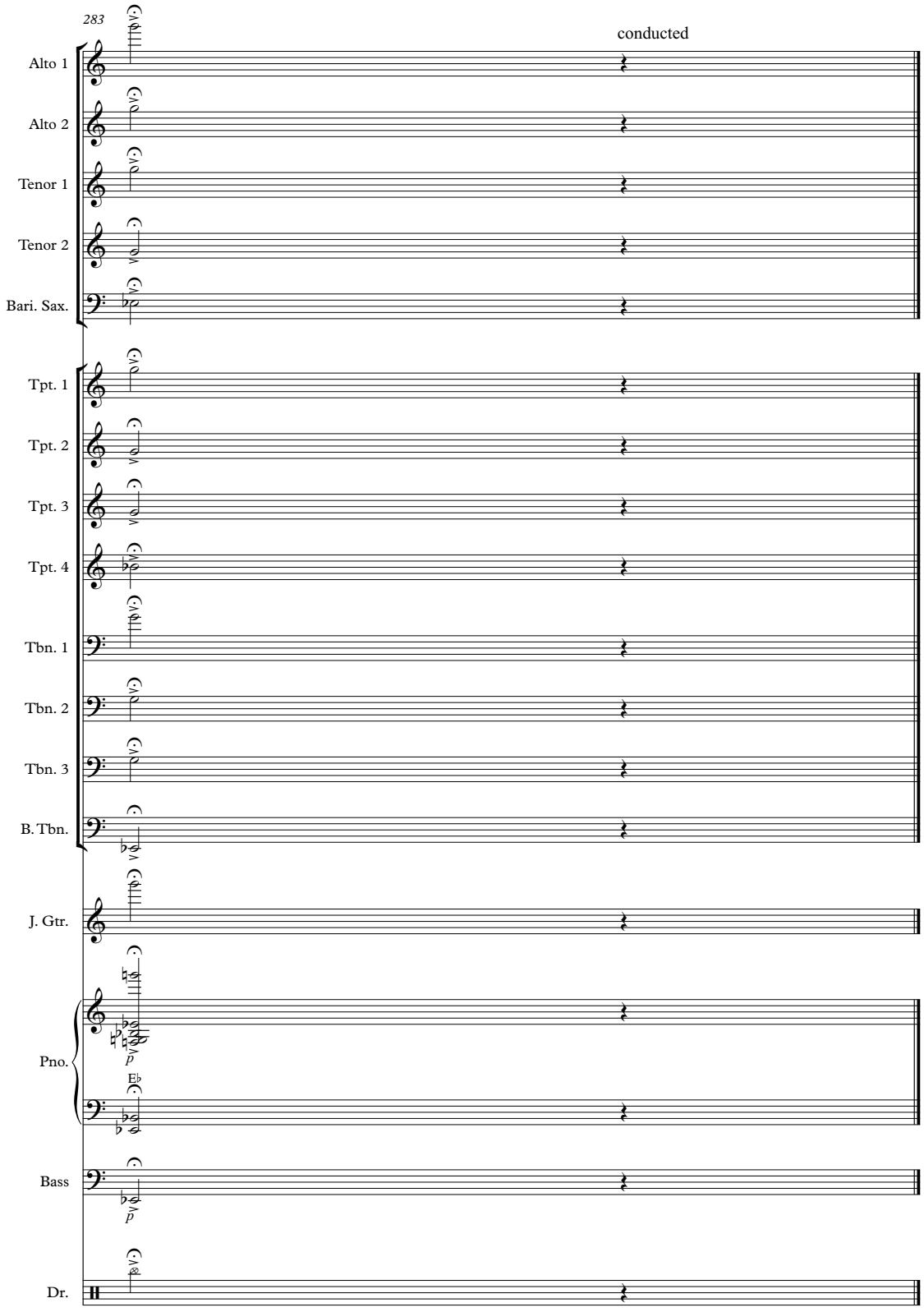

263
263
Tenor 1
Tpt. 1
Harm
mp
Tpt. 2
Harm
mp
Tpt. 4
Am7(b5)
resume solo
J. Gtr.
Am7(b5)
Pno.
Am7(b5)
Bass
Am7(b5)
Dr.


267
267
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
mp
alto flute
Tpt. 1
Tpt. 2
Tpt. 4
Tbn. 1
Tbn. 2
p
3
mp
Ab maj7
Cup
J. Gtr.
Pno.
Bass
Dr.


271
271
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 4
Tbn. 2
J. Gtr.
Pno.
Bass
Dr.
p
p
E♭/G
E♭/G
E♭/G


275
275
Alto 1
Alto 2
Tenor 1
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
harmon
Tpt. 4
F♯13
Tbn. 1
harmon
Tbn. 2
harmon
Tbn. 3
harmon
B. Tbn.
harmon
J. Gtr.
F♯13
Pno.
F♯13
Bass
F♯13
Dr.


279
279
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Emaj7(♯11)
mp
Pno.
Emaj7(♯11)
mp
Bass
Emaj7(♯11)
mp
Dr.


283
conducted
Alto 1
Alto 2
Tenor 1
Tenor 2
Bari. Sax.
Tpt. 1
Tpt. 2
Tpt. 3
Tpt. 4
Tbn. 1
Tbn. 2
Tbn. 3
B. Tbn.
J. Gtr.
Pno.
Bass
Dr.